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ABSTRACT

The study attempted to measure world-of-work values and perceptions at entry and after a period of employment of enrollees in Plan D of the Public Service Careers (PSC) Program, a Federal program designed to bring disadvantaged individuals into Federal employment. A PSC Enrollee Questionnaire, developed from a logical taxonomy of world-of-work values based on an extensive review of related literature, was administered twice, along with supervisor evaluations, for initial testing and at six months after employment. The first session involved 328 enrollees in the entry-level component, 106 individuals in the upgrade component, and 95 Federal employees holding equivalent positions to those of PSC entry-level workers. The second session involved 211 PSC entry-level enrollees and 137 of their supervisors. Project background, methodology, data analysis, summary of findings and recommendations are presented, with 27 tables. Appended material, encompassing half the document, presents the data collecting instruments and responses. Conclusions state that PSC enrollee perceptions of world-of-work values were congruent with the "middle-class value system", these values were maintained through job experience, and the PSC employee is generally underemployed in the entry job and might continue to be after one promotion. (LH)

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Final Report

A Study of the Success and Work Expectancies of Public Service Career Employees

by

L.L. Lackey and T.O. Jacobs

HumRRO Division No. 4
Columbus, Georgia

October 1972

Prepared for

United States Civil Service Commission
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HUMAN RESOURCES RESEARCH ORGANIZATION
300 North Washington Street • Alexandria, Virginia 22314

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16. Abstracts

This study was designed to develop methodologies for measuring world-of-work values and perceptions of enrollees in Plan D of the Public Service Careers (PSC) Program, both in the entry-level component and in the upgrade program.

The approach involved the development of a logical taxonomy of world-of-work values based upon an extensive review of the literature on the motivation to work. Several questionnaires were constructed for obtaining data concerning world-of-work values and perceptions from PSC enrollees and other workers performing similar duties. These data collection instruments were administered twice, once for initial testing, and at six months after employment.

Results of the initial testing were used to compare workers in the entry level to those in the upgrade program. Outcomes of the second testing were related to supervisory evaluations of the PSC enrollee to learn what goals and goal changes are associated with success in the PSC Program.

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FOREWORD

This study of the success, goals, and perceptions of enrollees in Plan D of the Public Service Careers Program has as an overall objective the determination of the impact of Federal employment upon the world-of-work values and perceptions of individuals entering the PSC Program.

The project was performed by HumRRO Division No. 4, Columbus, Georgia under the sponsorship of the Personnel Research and Development Center of the United States Civil Service Commission (Contract No. CS132). Dr. T.O. Jacobs is Director of Division No. 4 and Principal Investigator, and Dr. L.L. Lackey was Project Director.

Assisting with the data collection were Jane V. Lee, Dr. John P. Fry, [illegible] and Lynn C. Fox. Louis E. DeGreeff and Sarah C. Morris tabulated the data, and Thomas M. Meierhofer assisted with the analyses.

Meredith P. Crawford
President
Human Resources Research Organization

SUMMARY AND RECOMMENDATIONS

RESEARCH PROBLEM

The focus of this project was on Plan D of the Public Service Careers (PSC) Program, a governmental program designed to bring disadvantaged individuals into Federal employment within merit system procedures. The PSC Program was also designed to provide upgrading potential to those currently employed at lower levels by the Federal government.

The purposes of this project were to (a) ascertain the world-of-work values and perceptions both of enrollees in the entry component of the PSC Program and of those in the upgrade component, (b) determine the impact of prolonged employment upon the world-of-work values and perceptions of those in the PSC Program entry component, and (c) relate any changes in world-of-work values and perceptions over time to program success and retention.

APPROACH

A logically derived taxonomy of world-of-work values was developed as the basis for construction and selection of questionnaires to assess the world-of-work values and perceptions of enrollees in the PSC Program. Two response formats, Likert-type and forced-choice, were used for the questionnaire that was developed, the PSC Enrollee Questionnaire.

Responses were elicited from three subject groups: (a) 328 enrollees in the entry component of the PSC Program, (b) 106 individuals in the upgrade component of the PSC Program, and (c) 95 employees of the Federal government occupying positions generally equivalent to those held by PSC entry-level workers. Samples were drawn from Washington, D.C.; Baltimore, Maryland; Fort Ord, California; White Sands, New Mexico; and Pensacola, Florida.

There were two data collection sessions, with a time interval between sessions of approximately six months. The results of Session I were used in (a) assessing the world-of-work values and perceptions of entry-level enrollees in the PSC Program, and (b) making comparisons among the three subject classifications.

In Session II, responses were obtained from 211 PSC entry-level enrollees and 137 of their supervisors. Data obtained from entry-level respondents were analyzed by means of *t* tests to assess changes in world-of-work values and perceptions over time. Product moment correlations were computed in order to relate differences between sessions on relevant scores to ratings of each worker by the appropriate supervisor on performance, adjustment, motivation, stability, and potential. Additional data obtained from each supervisor consisted of a score on the least preferred coworker scale. Each entry-level enrollee also rated his supervisor on scales assessing the leader behavior dimensions of consideration and initiation of structure. Scores assigned supervisors were compared on each dimension on the basis of the supervisor's sex and ethnic group by means of *t* tests.

The PSC Enrollee Questionnaire was factor analyzed by means of a principal-components factor analysis with varimax rotation.

RESULTS

Only results from the Likert-type response condition are reported here since those from the forced-choice response condition were generally less reliable.

(1) For Session I, few differences were found between the three subject groups on world-of-work values and perceptions.

(2) For both sessions, subjects discriminated among the various categories of values, with the most highly valued outcomes of work perceived as intrinsic benefits and the opportunity for self-development. The Intrinsic Benefits area subsumed goals reflecting "the work itself," in the Herzberg sense. Goals categorized as Developmental Needs, while similar, reflected achievement as opposed to content of work.

(3) There were few significant differences between sessions in the world-of-work values and perceptions for entry-level PSC enrollees.

(4) Sex differences in ratings of goals in Session II were minimal, with only one goal, Good Working Conditions (Like Air Conditioning), being rated significantly higher by females than by males.

(5) According to responses to the Job Description Index, the two least satisfying job aspects were those of pay and promotions. Female subjects expressed significantly less satisfaction with both pay and promotions in Session II than they had reported for Session I.

(6) Reliability coefficients computed for the PSC Enrollee Questionnaire were substantially higher for the Likert-type response format than for the forced-choice condition.

(7) Changes from Session I to Session II, for those respondents participating in both sessions, were significant for the following psychological tests:

(a) Males felt they had less power in influencing their own outcomes.

(b) Males found their work less meaningful.

(c) Males and females had become less trusting of others and their motives; the females were less trusting and less interested in entering into relationships with others than were the males.

(d) Females became more interested in less routinized jobs.

(e) Males felt less concern for "middle-class" values.

(8) (a) White subordinates gave significantly higher ratings to their supervisors on leader behaviors showing consideration than did black subordinates.

(b) Black female supervisors received lower ratings on behaviors reflecting initiation of structure than any other supervisory classification.

(9) The least preferred co-worker score did not relate to the supervisor's rating of his subordinates.

(10) There were no systematic differences between the supervisors' ratings of their average non-PSC subordinates and those given their PSC subordinates.

(11) Increased valuation in Session II of the goals subsumed by the Gratification Demands value category was associated with high ratings on all five subscales in the Supervisor's Rating Scale.

(12) The five subscales in the Supervisor's Rating Scale were found to be significantly interrelated.

(13) The factor analysis conducted on the Session II data for the entry-level subjects resulted in the identification of five factors, which accounted for 53%

of the variance. These factors were assigned the following labels: (a) Security Through Job Accomplishment, (b) Social Interaction Orientation, (c) Materialistic Orientation, (d) Economic Instrumentality, and (e) Esteem Satisfaction Through Work.

(14) Scores on these five factors proved to be unrelated to supervisory ratings of subordinates on any of the five subscales of the Supervisor's Rating Form.

CONCLUSIONS

(1) The world-of-work values and perceptions of the PSC enrollees were, for the most part, congruent with those of the "middle-class value system."

(2) The presence of only a few changes in the world-of-work values and perceptions of the enrollees as a function of job experience, and the high level of supervisory ratings, indicate the appropriateness of these values for the work environment.

(3) The "typical" PSC enrollee probably is underemployed in the entry jobs, and might continue to be after one promotion.

RECOMMENDATIONS

The following recommendations are based upon the findings of this project and the relevant conclusions reached in the studies cited in the Introduction and Discussion portions of this report. These recommendations are focused on any future changes that might be made in the operation of the PSC Program.

(1) An "Outreach" feature should be added to the PSC Program, for the purpose of recruiting the extremely disadvantaged, both through direct contacts in the disadvantaged community and through referrals by appropriate agencies.

Inclusion of this feature would, of necessity, result in some modifications to the existing structure of the PSC Program. One such change would involve a shift in the allocation of resources so that more personnel would be available to engage in "Outreach" activities. It might be necessary to choose these personnel on the basis of criteria presently used in selecting personnel. Sequencing of the PSC Program activities would need to be considered because persons entering through outreach activities might exhibit values and attitudes different from the current enrollees. Restructuring and/or redesign of some features of the PSC Program might be necessary.

(2) Greater emphasis should be given the entry criterion that the applicant could not have obtained the job without PSC Program intervention.

(3) Greater emphasis should be placed upon providing information to, and obtaining the cooperation of, supervisors of PSC entrants.

(4) As new training courses are developed for supervisors of PSC entrants, special attention should be paid to topics that are especially relevant for enrollees (e.g., communication, behavioral expectations, and establishment of a supportive environment).

(5) Social skills courses developed for PSC entrants should *not* be predicated on the assumption that the entrant's values are substantially different from those of the "middle class," but should emphasize job-related behaviors.

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A Study of the Success and Work Expectancies of Public Service Career Employees

Chapter 1

INTRODUCTION

FOCUS OF PROJECT

This is the final report of a project to study the world-of-work values of enrollees in the entry-level and in the upgrade portion of Plan D of the Public Service Careers (PSC) Program, an innovative governmental program designed to bring employment within the reach of heretofore marginal workers. The rationale for this research project stemmed from a substantial body of research that has drawn attention to the special problems of the marginal worker, and has suggested that he may present formidable problems to an employing agency.

One of the principal purposes of this study was to assess the world-of-work values of the personnel enrolled in the entry component of the PSC Program. A second major purpose was to compare these findings with those obtained from (a) participants in the upgrade portion of the program who have successful job histories, and (b) individuals who, while holding jobs equivalent to those of the entry-level participants, were not themselves enrolled in the program. Additionally, the study involved a follow-up of those entry-level enrollees who remained within the PSC Program, to determine both the world-of-work values that are predictive of success in the program, and changes occurring during the first year of employment that reflect processes of organizational socialization.

PSC Program

The focus of the project was Plan D of the PSC Program, which offers entry and upgrading employment opportunities in the Federal Service. This program was created to bring the disadvantaged into public service employment within merit principles. Additionally, it was designed to help meet manpower needs in the public sector through upgrading of current employees. PSC was directed toward providing financial assistance to Federal agencies or state and local governments, in an effort to remove or eliminate those institutional, individual, or environmental barriers to public service that confront the marginal worker.

Numerous benefits were envisioned for the PSC Program. Among these would be greater utilization of human resources by public agencies, with the expected corollary of more efficient public service. Another potential benefit was the movement from public welfare rolls of many of the disadvantaged. Plan D of the program was focused solely on Federal agencies.

Applicants for the upgrade component of the program were those individuals currently employed in the Federal service who desired to better themselves. Enrollment in the PSC Program would provide additional training that would better qualify the individual for promotion.

Those individuals considered to be eligible for the entry portion of the program were selected on the basis of Department of Labor criteria for classification as "disadvantaged." These criteria define a "disadvantaged" person as being poor and unemployed, underemployed, or encountering barriers in work-seeking activities. In addition, the individual must be a school dropout, an ethnic minority group member, less than 22 years of age, 45 years of age or older, or handicapped.

Under Plan D, approximately 10% of existing lower-level jobs were redesigned for the entering enrollee, since the majority of those classified as "disadvantaged" would have few valued job skills. These beginning jobs were low both in required skills and in pay.

It was also anticipated that many applicants would encounter difficulty in completing a written entrance examination under the traditional procedure. The Worker-Trainer (W-T) Examination was therefore selected for evaluating candidates. The W-T Examination involves interviewing applicants for the purpose of evaluating their suitability for the beginning jobs. The evaluation is based not on educational or work-related achievements, but on degree of willingness to work in a low-demand type of job. Another purpose of the examination is to screen out the overqualified applicant. Scoring is on an inverse basis: the less the applicant has in the way of demonstrable skills, abilities, and achievements, the higher the score. By use of the W-T Examination and the inverse scoring procedure, the disadvantaged may be offered meaningful work within merit system procedures.

Objectives of the Project

To accomplish the previously specified purposes of the study, several explicit objectives were developed:

(1) To develop a methodology for measuring work goals and expectations of Public Service Careers (PSC) workers, both at entry-level and in the upward-bound component.

(2) Through implementing the developed methodology, to measure world-of-work values and perceptual orientations of individuals within the entry-level and upgrade components, and of persons occupying positions equivalent to those of entry-level participants (hereafter referred to as the equivalent group).

(3) To compare world-of-work values and perceptual orientations of each group with the other two groups.

(4) To measure world-of-work values and perceptual orientations of individuals within the entry component after they had been in Federal service for a period of six months. (Waiting for a longer period before the second measurement might mean that little data would be available, because of the likelihood of appreciable attrition.)

(5) To compare world-of-work values and perceptual orientations of individuals within the entry component at the time of the second data collection session with the corresponding values and orientations obtained in the initial data collection session—shortly after their entry into the program.

(6) To determine how supervisors of PSC entry-level enrollees rated them in comparison with non-PSC subordinates in order to (a) identify the extent of organizational socialization that had taken place, and (b) assess the extent to which such factors as sex, ethnic group membership, or leadership style of the supervisor systematically affected ratings of PSC enrollees.

The results presented in this report are based on two data collection sessions. The first data were collected as soon as possible after entry-level personnel entered the program. The second session was six months subsequent to the midpoint of the initial collection session.

REVIEW OF LITERATURE

The review of recent literature presented in this section provides an updating of the research results and conceptualizations upon which the project was based, and should afford a frame-of-reference for the remainder of the report. The review is not comprehensive, but is limited to that literature seen as relevant to the project objectives.

The "Hard-Core Unemployed" Concept

A point agreed upon by several researchers (e.g., Kaplan and Tausky, 1972) concerns the difficulty in defining the "hard-core unemployed." On occasion, this phrase is used interchangeably with such terms as "marginal worker" and "disadvantaged." Porter (1970) maintains that the term "marginal worker" subsumes "hard-core unemployed." He saw a marginal worker as an individual who had not demonstrated regular work attendance and/or had not met standards or adequate levels of performance as defined by the organization. Attendance and performance, thus, are defined as two distinct aspects of marginality. An individual must meet both criteria to be considered nonmarginal.

Porter felt that the term "hard-core unemployed" was most often used in reference to an individual having a record of little, if any, steady employment. Stressing the attendance aspect resulted in a narrower scope for this classification as compared with the "marginal worker" classification. Porter's position places greater emphasis on the individual's employment history than on particular personal and demographic characteristics for identification of the disadvantaged. Unfortunately, the use of any labeling process tends to result in the development of stereotypes.

Ferman (1970), in considering the myth and reality of the hard-core unemployed, presented several stereotypes commonly associated with the phrase:

(1) The hard-core unemployed have never worked steadily enough to have learned what they must do to hold a job.
(2) Among the hard-core unemployed, the more formal schooling the person has, the better the job he will find.
(3) Once a person is a member of the hard-core group, he will always be a member.
(4) More available jobs would reduce the number of hard-core unemployed.
(5) The hard-core unemployed individuals are all just alike.
(6) There are real differences between the hard-core and other working groups.
(7) Former hard-core unemployed leave their jobs more frequently than do workers in general.
(8) Extensive services are needed for all hard-core unemployed to become part of the labor force.

Ferman presented data from various sources to question each of these stereotypes. The results of several other programs support Ferman's contention that "These stereotypes are deeply ingrained and require the most careful and intensive research" (e.g., Hodgson and Brenner, 1968; Kirchner and Lucas, 1972). Private industry, especially through the National Alliance of Businessmen's JOBS (Job Opportunities in the Business Sector) program, has shown that many of these "hard-core unemployed" can and do make effective workers, frequently in the absence of "necessary" supportive services and social training.

With respect to the stereotype of the hard-core unemployed as a single, unitary, homogeneous group, Johnson (1969) presented a break-out of several groups comprising this population. As segmented by Johnson, these groups were:

(1) Young blacks. Reared in northern urban centers, they are frustrated by the "system" as the means of solving their problems. They have not completed school, nor have they developed any job skills. They are angry and impatient.
(2) Older men and women (45 and above). They went north during the war to work in industrial centers. After their jobs terminated, they remained. Few have skills in demand by industry.

(3) New migrants. Large numbers went to northern cities until between 1966 and 1968. Most of these migrants are characterized by having few or no job skills, low levels of education, and a lack of knowledge about the ways of urban life.

(4) Puerto Ricans. Not only are they burdened by a relatively low level of formal education, but by a language barrier as well.

(5) Mexican-Americans. As with the Puerto Ricans, both an education and a language barrier serve to limit the type of available work.

(6) American Indians. These are part of the hard-core unemployed group by definition.

Of course, other similar delineations can be made. Doering (1969) divided the ghetto labor force into at least five categories of disadvantaged:

(1) Teen-agers who have worked little or none.
(2) Workers with steady employment in low-wage jobs.
(3) Adults who have not worked steadily and learned the discipline of work.
(4) Those persons for whom barriers to employment exist, such as the aged.
(5) Individuals who have a source of income but are not in the labor force, such as welfare recipients.

Classifications such as these serve to point up the heterogeneity of thought about the "hard-core unemployed" category.

Value Congruence

One result of such stereotypes is that the "hard-core unemployed" are frequently viewed as having very different commitments and values concerning the world-of-work than do other working groups. Several researchers have addressed themselves to this question of value congruence between the "hard-core unemployed" and other working groups (e.g., Kaplan and Tausky, 1972; Williams, 1968; Goodale, 1971; Bullough, 1967; Lewis, *et al.*, 1971).

Kaplan and Tausky found that while "hard-core unemployed" viewed work for its economic utility in providing the means for satisfying the more basic needs, they also seemed to have internalized the prevailing work ethic. This work ethic includes a negative stereotype of people accepting welfare. The subjects in this study associated respectability and prestige with holding a job. While the subjects had been unable to successfully maintain employment, they generally felt that it was through employment that they could demonstrate their social worth. The conclusions by Williams (1968) and Goodale (1971) were generally consistent with the findings of Kaplan and Tausky, that is, that the disadvantaged or hard-core unemployed have values similar to those of the non-disadvantaged workers, and a like commitment to work.

On the other hand, other researchers (e.g., Bullough, 1967) have reported value differences between the hard-core and other groups. Bullough found that black ghetto residents expressed greater feelings of anomie and powerlessness than blacks living in integrated suburban areas.

The behavior of the individual provides the basis for inferences concerning his values, beliefs, and attitudes. Various plausible causal factors should be considered when inferences are to be drawn from observed behavior. An alternative plausible factor in the situation concerning the hard-core unemployed is the opportunity structure *known* and accessible to the individual.

Two facets of the opportunity structure confronting the hard-core unemployed have been given attention by several writers. These concern the amount of vocational and job market information known to the individual.

Johnson (1969) stated that of 450 youths contacted during a study conducted in Philadelphia, nearly one-half were unable to express any job preferences, and those with preferences cited the jobs commonly held by friends and relatives. In *An Instructional Program for Employability Orientation* (Osborn, *et al.*, 1972), developed by HumRRO for the U.S. Department of Labor, a separate Instructional Module for vocational goals was presented as essential for all Work Incentive Program (WIN) enrollees. The majority of the hard-core unemployed or disadvantaged seemingly are unaware of the multiplicity of vocational choices that may be available to them.

The amount of labor market information known to many of the hard-core unemployed is much more limited than it should be. Some sources of information generally used to communicate labor market information—for example, major newspapers and radio stations—are inefficient with respect to reaching the hard-core unemployed. Another limitation, as presented by Doeringer (1969), stems from the fact that friends and relatives are a frequent source of employment information: as the employment rates in the ghetto are lower, there are fewer sources of input to such an information system, and consequently, less job information available to any user of such a system. Further, because transportation frequently presents a problem, limiting geographic mobility, only information about jobs near the ghetto is likely to be available.

Some programs in private industry, which attempted to hire and train the hard-core unemployed, were initially unsuccessful because of this type of information deficit. For example, the Pacific Telephone Company asked employees to recommend the company and its program to friends. The company discovered they were hiring the *under*employed rather than the *un*employed members of minority groups, because their present employees had no contact with the hard-core unemployed.

Frequently, a corollary of this paucity of labor market information is a limited scope of job search. One finding of the survey by Johnson (1969) was that, of those 450 youths in Philadelphia, two-fifths had never made a single contact with an employer, and only one out of five had made as many as one contact per week.

One way of increasing the likelihood that the hard-core unemployed will be aware of employment opportunities is through ensuring that such information is available to some members of the target population. The success of many of the private industry hard-core training programs seems to have been due to recruiting or locating a plant in or very near the ghetto area. The Ford Motor Company Program among others, used active recruitment in the inner city area. Their best publicity was from word-of-mouth communication by those already on the payroll.

Retention and Performance of the Ex-Hard-Core Unemployed

One of the stereotypes presented by Ferman (1970) dealt with retention of the ex-hard-core unemployed in the labor force. A frequent forerunner of termination, non-regular attendance, has also been stressed by Porter (1970) as a characteristic of the hard-core unemployed. While many of the programs initiated by private industry reflect a retention rate for the ex-hard-core unemployed comparable with that of other blue-collar workers, there is essential agreement that non-regular attendance is one of the more critical problems of the ex-hard-core (Johnson, 1969; Doeringer, 1969). The critical factor in achieving above-average retention emerged as the presence of a full-time training staff or minority employment specialist (Janger, 1972) to serve a counseling, supportive function.

The results of the Ford Motor Company's Detroit Recruiting Project seem representative of many programs focused on employing the hard-core unemployed. An analysis of the performance ratings of over 2,000 hard-core hires by Ford showed that between 40 and 50% were evaluated by their supervisors as average in performance, while about 30% were rated above average (Johnson, 1969).

Several other studies have dealt with job performance of the hard-core as affected by such variables as supervisory attitudes, organization climate, and the workers' own attitudes. Friedlander and Greenberg (1971) sought to predict successful employment of the hard-core unemployed using four predictor variables:

(1) The workers' biographical/demographic data.
(2) Attitudes of the worker toward work (included among the nine scales were motivation to work, powerlessness, and importance of job characteristics).
(3) Attitude changes over a two-week orientation/training program.
(4) Job climate (as reflected in new worker treatment, support from peers, and support from supervisors).

The criterion variables were job retention, work effectiveness, and work behavior. The most important finding was that the more supportive the organizational climate, the better the workers' ratings on competence, congeniality, and amount and type of effort expended. Interestingly, ratings of reliability of the worker correlated negatively and significantly with the number of weeks worked. Also, supervisors rated the organizational climate as being far more supportive than did the workers. Other than these cited results, the predictor variables were of little benefit for estimating likelihood of successful employment. The two-week orientation/training program had no effect on the workers' attitudes toward work.

Beatty (1971), considering both first- and second-level supervisors, studied the effects of the supervisory variables of Consideration and Initiation of Structure on the job performance of ex-hard-core unemployed. The most noteworthy result was a curvilinear relationship between supervisory consideration and trainee performance, which suggested a positive relationship between the two for a majority of the trainees, but a negative relationship at the performance extremes.

The complexity of the results of these studies is representative of various investigations of the dynamics underlying job performance. What motivates one worker to produce effectively, while another performs at the minimum acceptable level? To answer this and other related questions, researchers have broadened the scope of their efforts. In addition to supervisory practices, factors such as various aspects of job satisfaction and measures of job motivation have been included in numerous research designs.

Job Satisfaction, Motivation to Work, Performance

In a recent review of job satisfaction studies, Ronan (1970a) discussed both the job variables related to satisfaction and the relationship of satisfaction to performance behaviors.

Similar dimensions of job satisfaction have emerged from numerous studies in this area. These are identified by Ronan (1970a):

(1) The work itself.
(2) Direct supervision.
(3) Organization and management.
(4) Advancement possibilities.
(5) Economic rewards of the job.
(6) Fellow workers.
(7) Type of working conditions.

While relative agreement has been observed as to relevant and salient dimensions of job satisfaction, several findings are of significance with respect to the measurement, meaning, and appropriate conceptual framework for interpretation of these dimensions.

Wanous and Lawler (1972) reviewed nine operational measures of job satisfaction and conducted a study to determine the relationships among them. The operational definitions of job satisfaction did not yield empirically comparable measures of job satisfaction. The convergent and discriminant validity analysis indicated that it was possible to validly measure people's satisfaction with different facets (e.g., pay, promotions) of their jobs. Also, it was found that correlations between facet satisfaction and dependent variables are likely to be a function of both the particular facet considered and how it is measured or operationally defined.

The work by Simonetti and Weitz (1972) calls for reconsideration of the dynamics underlying job satisfaction. These researchers found that various job factors are not related to overall job satisfaction at the same level for different occupational groups within a country. Some differences were also noted when countries were compared. The study by Nezzer, *et al.* (1971) reported similar findings for a comparison of five companies of the same corporation within the United States. The purpose of this study was to identify the determinants of overall job satisfaction and assess the interorganizational similarities and differences. While significant predictors of overall satisfaction for the entire sample were identified, the differences make it difficult to formulate a single interpretation of the dynamics involved.

Jacobs (1970) presents a review of two schools of thought concerning the relationships between various aspects of the work environment and resulting job satisfaction. These two schools of thought, traditional theory and motivator/hygiene theory, point up the complexity of job satisfaction.

> "Traditional theory holds that individual members of organizations have personal needs that can be satisfied either directly or indirectly through their work involvement. A need supposedly creates a state of tension that continues as long as the need is not satisfied. In theory, then, the organization can offer the means of satisfying the need in exchange for the worker's compliance with organizational requirements." (p. 126)
>
> "Dissatisfaction, or a state of tension, theoretically is aroused when a person cannot meet or satisfy certain of his needs. . . . Thus, within the traditional framework overall job satisfaction is thought to vary directly with the extent to which an organization can satisfy individual needs. . . .
>
> "Substantial work has been done to learn what these needs are. One of the best known classifications of individual needs is the hierarchy of motives theory . . . , which holds that human needs or motives can be arranged into five sequential categories: (a) physiological needs, (b) safety needs, (c) acceptance needs, (d) esteem needs, and (e) self-actualization needs.
>
> "These needs form a hierarchy in terms of importance, or prepotence, to the individual. . . . However, while preoccupation with a more basic need, such as security (safety), will not in general permit interest in the higher level needs such as self-actualization, satisfaction of the more basic needs does not necessarily lead to a quest for gratification at the higher levels. Some degree of social learning may be necessary before the higher order, less basic needs can emerge. . . . " (pp. 127-128)
>
> "Not all these needs can be satisfied by most organizations, for most of their members. . . . satisfaction of higher level needs such as self-esteem and self-actualization is more difficult, especially at the lower echelons within large formal organizations (e.g., factories with assembly-line technologies)." (p. 128)
>
> "In contrast to traditional theory, motivator/hygiene theory contends that the aspects of the work environment that provide satisfaction are not necessarily the same as those that cause dissatisfaction. . . . Organizational environments can also provide *obstacles* to long-range goal attainment . . . these will lead to dissatisfaction. . . . " (pp. 126-127)
>
> ". . . a departure from traditional theory came from the observation that some kinds of work gratifications seemed to act as *satisfiers*, while others act as *dissatisfiers*. . . .

> "From the motivator/hygiene point of view, it appeared that there *should* be (a) factors in the work or work environment that would lead to (b) the existence of attitudes toward work that would, in turn, (c) have measurable effects of productivity itself. A criticism of previous studies was that, in general, they did not address these three elements simultaneously. . . . " (pp. 129-130)

Herzberg, *et al.* (1959) used a form of the "critical incident" method to identify factors that had been associated with positive or negative feelings toward the job. The satisfiers (motivators) identified were (a) achievement, (b) recognition, (c) work itself, (d) responsibility, (e) advancement. The dissatisfiers (hygiene) were: (a) interpersonal relationships with superiors, (b) interpersonal relationships with peers, (c) technical supervision, (d) company policy and administration, (e) working conditions, and (f) personal life. From the viewpoint of motivator/hygiene theory, it is felt

> " . . . that satisfier factors are more likely to lead to satisfaction by their presence than to dissatisfaction through their absence, but that factors leading to job dissatisfaction are seldom associated with increases in job satisfaction through being absent. The job satisfiers almost always dealt with factors intrinsic to the job itself, while the dissatisfiers related to the context in which the job was accomplished." (Jacobs, 1970, p. 131)

This is in contrast to traditional theory, which assumes that needs at all levels will be associated with both satisfaction and dissatisfaction. To the extent that a need is present, frustration in its fulfillment should produce dissatisfaction, while gratification should result in satisfaction.

Implications of these two theories are somewhat at variance with each other; a substantial number of studies have tested the differences between them. A complicating factor in testing such differences stems from King's (1970) delineation of five variations of Herzberg's two-factor theory. Two studies focused on these variations yielded similar results; fewer than 50% of the predictions based on the variations were supported (Hulin and Waters, 1971; Waters and Waters, 1972). The conclusion proposed by these researchers was that many of the results that have supported the two-factor theory are due to the methodology used rather than to the viability of the theory itself. The general result of such comparative studies has been that neither theory is " . . . adequate alone, each to the exclusion of the other" (Jacobs, 1970, p. 140), but each has a valuable contribution to make.

Several theorists have attempted to reconcile these two schools of thought (Wolf, 1970; Soliman, 1970). Soliman found that, while two-factor theory is in fact a function of its own methodology, it is correct with respect to the two sets of need categories proposed, motivator and hygiene. However, the two-factor view on the multidimensionality of the concept of need satisfaction—that satisfaction and dissatisfaction appear to be opposite ends of a single continuum—has not been substantiated. Motivator and hygiene needs were found to be related to each end of this continuum. This researcher concluded that the organizational environment was an important variable in mediating the relationship between each need category and overall job satisfaction. In an environment that adequately satisfies all needs, the motivator needs would be a more important source of job satisfaction than the hygiene needs. For an environment that provides a more moderate satisfaction of all needs, both motivator and hygiene needs are related equally to overall job satisfaction. Extrapolation would indicate that for a non-need-satisfying environment, the hygiene needs would be the more highly related to overall job satisfaction.

For Wolf (1970), the key to the resolution of the conflicts between traditional and two-factor theory lies in the conceptual separation of satisfaction and motivation. Motivation should be regarded as the force producing movement toward an end state, or satisfaction. This conceptualization focuses more attention on the behavioral or performance aspect of work. Limited empirical support for such a conceptualization is noted in the study by Wernimont, *et al.* (1970). Many studies that are concerned with measuring job motivation do so through use of job satisfaction measures. These researchers felt that it should be determined whether employees themselves actually see any difference in the way that various aspects of their jobs affect their work motivation, as compared to their job satisfaction. Results indicated that employees did not see the same job variables as having equal importance in contributing to job satisfaction and to their motivation to work. Generally, the same variables were given the higher ranking positions in both cases, indicating that the basic assumption—that more satisfied individuals have greater motivation—is tenable. The goal (end state) of satisfaction is expected to impact upon job performance behavior to some extent.

Ronan (1970a) reviewed several studies bearing on the relation between job satisfaction and performance behaviors. For those studies using a single criterion for job satisfaction, two interesting conclusions emerged. First, while there appeared to be a general relationship between job tenure and satisfaction, termination causes (while probably dominated by economic concerns) may be quite specific to the organization involved. Secondly, while numerous studies have demonstrated that "... there are relationships between indices of job satisfaction and level of performance effectiveness ... no studies ... show which is cause and which effect." (Ronan, 1970a, pp. 6-7)

Studies using multicriteria provided evidence of the complexity of the interrelationships among various performance measures. One study reviewed by Ronan commented upon the unexpected variety of one assumed unitary variable—absenteeism—with some types of absenteeism being unrelated to other types. However, the same study did find that low job satisfaction was related to high unexcused absenteeism.

The most consistent result noted in the multicriteria studies reviewed by Ronan (1970a) dealt with the importance of the immediate supervisor for job satisfaction indices. Supervision, Ronan found, "... is the major link between job satisfaction and personnel behaviors, along with some influence of age and education." (p. 27)

While Thompson (1971) found that the greater the perceived supportiveness of the supervisor, the higher the job satisfaction, this finding was qualified by the self-perception of the employee. This qualification reflected the negative relationship between self-perception scores and perceived supervisory style. The conclusion reached by this author was that job satisfaction was jointly affected by supervisory style and favorability of self-perception.

Importance of Job Characteristics and Job Satisfaction

Several studies have been conducted for the specific purpose of achieving greater understanding of the basis of job satisfaction, particularly the relation between satisfaction and importance. Campbell (1971) presented results that indicated that the supervisor was more of a determinant of employee satisfaction than was the job.

Ronan (1970b), who felt that the relevant dimensions of job satisfaction had been successfully identified, attempted to assess agreement as to the relative importance of several of these dimensions. Three employee groups of respondents were formed in a manufacturing industry: (a) managerial—supervisory, (b) salaried—nonsupervisory, and (c) hourly employees. There was a high degree of agreement among the three groups as to 68 job characteristics, with items descriptive of the nature of the work done (intrinsic) most frequently seen as important. One of the characteristics about which some disagreement was observed was job security, rated as important by both the managerial and hourly employees, but not by the salaried workers.

A caution concerning the methodology for assessing both importance and satisfaction was sounded by Dachler and Hulin (1969). These researchers replicated a previous study, the results of which had indicated a V-shaped regression line when the mean importance values for 73 environmental and job characteristics were plotted against the mean satisfaction scores. When the same scale (Likert-type) was used to measure both satisfaction and importance, inspection of cell means indicated a V-shaped relationship between satisfaction and importance. Cell means for the items for which satisfaction was assessed through use of a different scale did not exhibit the V-shaped function. The authors concluded that the lack of support for such a relationship, when different types of measures are used for satisfaction and importance, indicates a strong possibility of artifact in the previous study's results.

One approach taken in investigation of the relation of satisfaction and importance has been to use the importance of a job factor as a weighting for the reported satisfaction with that factor.

Blood (1971) felt that the information provided by the subject as to the importance of a job aspect has little or no relationship to the actual effect of that aspect on overall satisfaction. This theorist felt that, if the rated importance of a job aspect was to be included in weighting the rated satisfaction of that aspect, then importance should be treated as a binary property. Overall job satisfaction would then be reflected in the sum of the satisfaction with all aspects of the job that were rated as important.

Waters and Roach (1971) and Mikes and Hulin (1968) reported comparisons of unweighted and importance-weighted satisfaction measures as predictors of a performance criterion (turnover). The results of both studies were in agreement that an unweighted satisfaction measure was as predictive of termination as an importance-weighted measure.

The frequent lack of agreement between results of studies concerned with the same concepts reflects the extent of additional work needed in the areas of job satisfaction and job performance. Results that prove to be specific to a given area or organization are scanty contributions to theory development and refinement.

Chapter 2

APPROACH

Described in this chapter is the approach taken to investigate the three questions most pertinent to the project: What are the world-of-work values and perceptions of those individuals entering the PSC Program? What changes are there in these values and perceptions after the enrollees have been in the work environment for some time? How do the world-of-work values and perceptions of these enrollees compare with other worker groups?

THE TAXONOMY OF VALUES

As a first step in accomplishing the specified objectives of the project, a taxonomy of values was generated. This taxonomy was the basis for selection of goals to be included in the PSC Enrollee Questionnaire.

While the taxonomy of values resulted from a considerably more extensive review of the literature, the basic framework was derived from three sources: a taxonomy developed by Porter (1970); the motivator and hygiene theory (Herzberg, Mausner, and Snyderman, 1959); and Maslow's (1954) hierarchy of needs hypotheses. While none of these three was completely adequate in itself, Porter's taxonomy, together with a social reference basis for interpreting apparent differences between the motivator/hygiene and hierarchy of needs findings (Jacobs, 1970), led to the development of a taxonomy that would be useful for the lower socioeconomic level subjects expected to be PSC entry-level enrollees.

Eight value categories constituted the taxonomy of values. The titles assigned the categories and a brief description of the values subsumed by each are shown in Table 1. The goals classified within each of the value areas are listed in Appendix A.

Table 1

Value Category Titles and Descriptions

Title	Description
I Extrinsic Benefits	Values extrinsic to the job itself (Herzberg, 1959), which are related to security needs of individuals (Maslow, 1954). Values seen as extrinsic reflect the job context, the working conditions.
II Intrinsic Benefits	Includes both values intrinsic to the job itself (Herzberg, 1959) and those related to the self-actualization need in Maslow's (1954) conceptualization of the need hierarchy. Values seen as intrinsic concern the pride, satisfaction, and recognition realized from the work itself.
III Gratification Demands	Values with attainment that is contingent upon a source of income (e.g., ability to purchase desired items).

(Continued)

Table 1 *(Continued)*

Value Category Titles and Descriptions

Title	Description
IV Interpersonal Relations With Co-Workers	Values reflecting extrinsic benefits or the self-esteem and affiliative needs of Maslow. Determines the value placed on esteem, recognition, and acceptance given by co-workers.
V Interpersonal Relations With Supervisors	Values of recognition, acceptance, and individual assistance by the supervisor.
VI Interpersonal Relations With Family	Value of one's family being proud of the job held.
VII Interpersonal Relations With Friends	Values reflecting Maslow's esteem and affiliation needs. Determines the extent to which the job itself is valued as a means of obtaining respect and association of friends.
VIII Developmental Needs	Values reflecting Maslow's need for self-actualization. Determines the extent to which self-growth and development of job competency is valued.

THE QUESTIONNAIRES

The PSC Enrollee Questionnaire for the first administration consisted of three independent sections. The first two sections were designed to elicit ratings of values and job attractiveness. The third section required each enrollee to respond to a number of psychological tests.

For the second administration of the PSC Enrollee Questionnaire, a fourth section was developed, to elicit enrollee ratings of the immediate supervisor on consideration activities and initiation of structure behaviors (Hemphill and Coons, 1957). Also included in the second data collection was a two-part questionnaire for supervisors, which elicited supervisor ratings of (a) the least preferred co-worker and (b) immediate subordinates, both PSC enrollee and average non-PSC employee, on five different scales.

Development of the Questionnaires

The PSC Enrollee Questionnaire was designed to achieve two purposes: (a) to be relevant for entry-level personnel in the PSC Program and (b) to be conceptually sound.

Descriptions and rationale for Sections 1 and 2 of the Questionnaire are presented below, with a listing of the items used in each section appearing in Appendices A and B, respectively. Brief descriptions of Sections 3 and 4 follow; more comprehensive descriptions (including the items within each section) and the rationales for inclusion of these sections in the questionnaire are presented in Appendices C and D. The two supervisor questionnaires included in the second data collection session are also described briefly in this section; further description and a listing of the questionnaire items are in Appendix E.

Section 1: Values. The taxonomy of values served as the basis for item selection in this section of the questionnaire. After a literature review and rationale analysis, 32 goals (values) were selected as representative of the eight value categories. These goals were randomly distributed within this section of the questionnaire.

For each of the 32 goals, the following four ratings were obtained:

(1) The worth of the goal to the worker.
(2) The worker's expectation of achieving that goal if he tries.

(3) The level of effort perceived as necessary to achieve the goal.

(4) The worth of the goal to the worker's best friend.

The first three ratings test an expectancy theory of motivation to work. The fourth rating provides the basis for inferences concerning the worker's socialization into the work environment, as would be evidenced by any change in relationship between his own values and those of an off-the-job friend, over time. In practice, the goals were intermingled in such a manner that the respondent did not rate the goals for any value category in sequence. This section of the questionnaire was entitled Rating Form for Jobs.

Section 2: Job Satisfaction. The instrument selected to assess job satisfaction of the workers was the Job Description Index (Smith, Kendall, and Hulin, 1969). The JDI measures satisfaction with five areas of a job: the type of work, the opportunities for promotion, the pay, the supervision, and the co-workers on the job. (See Appendix B for a complete listing of the items within each of these five areas.)

The JDI was chosen for inclusion because it was a standardized instrument on which a substantial amount of developmental work had been conducted. For the purposes of this study, the JDI was to serve as an anchor in (a) interpreting the relationship of the samples surveyed to other known samples, and (b) providing a basis for establishing construct validity for related instruments.

Section 3: Psychological Tests. Generation of the psychological tests included in the questionnaire was based on review of the literature dealing with the special needs and competencies of marginal personnel. Although some of the tests developed parallel existing tests, most were specifically developed for this project. Therefore, results of most of these tests are not directly comparable with other similarly labeled tests.

The 14 tests chosen for inclusion are briefly described below. The first five tests constitute a measure of alienation from work as conceptualized by Seeman (1959, 1967); the others pertain to facets of anomie.

Psychological Test	Brief Description
Powerlessness	Belief that the individual has little control over the forces determining the outcomes in his life.
Meaninglessness	Belief that work is only a means of achieving immediate goals.
Normlessness	Perception by individual that some goals cannot be attained through socially approved behavior.
Value Isolation	Sense of isolation from members of society and their values.
Self-Estrangement	Extent to which individual is unable to enter into meaningful relations with others.
Time Sense	Ability and/or desire to delay gratification of immediate needs in favor of more central needs at a later time.
Cynical Distrust of Organizations	Individual's lack of faith in the organization's integrity.
Cynical Distrust of People	Individual's unwillingness to enter trusting relationships with other people.

Psychological Test	Brief Description
Achievement Motivation	Interest in relative status achieved through occupational means.
Weak Self-Regard	Extent to which an individual's self-concept is negative.
Expectation of Success	Generalized expectancy of success in attaining any goal.
Protestant Ethic	Value placed on work in general.
Work Demands	Preferred level of job demands is a routinized job with little variability in the demands.
Orientation Toward Work	Rejection of "middle-class" norms reflecting acceptable jobs.

Data Collection Instruments for Session II. Three questionnaires were developed for the second data collection session. The first two were focused on behavior of the leader (supervisor) as (a) seen by the PSC enrollee subordinate (Assessment of Supervisory Influences), and (b) as reflected in the supervisor's self-report of perceptions of a least-preferred co-worker (Inventory for Supervisors). The third questionnaire was used in obtaining the supervisor's rating of the PSC enrollee on several relevant dimensions (Supervisor's Rating Form).

Assessment of Supervisory Influences. Entry-level PSC enrollees participating in the study completed this questionnaire with reference to their immediate supervisor. The two dimensions of leadership behavior, "Consideration" and "Initiating Structure," identified by researchers at Ohio State University, were seen as very relevant to the purposes of this project. Appendix D presents the items that were used for tapping each of these two dimensions, and the direction of scoring.

The "Initiating Structure" dimension has to do with the extent to which a leader initiates actions and structures the work situation toward goal attainment. A high score on this dimension indicates a leader who tries to establish well-defined patterns of organization, channels of communication, and ways of doing a job.

The "Consideration" dimension reflects an interpersonal orientation in the leader's behavior, often characterized by feelings of mutual trust, openness to subordinate's ideas and requests, and consideration for their feelings. Consideration for the feelings of others may be viewed as consisting of esteem-giving behavior, of ensuring that others feel they are receiving a measure of esteem in line with their worth.

Inventory for Supervisors. This questionnaire corresponds to the Least Preferred Co-Worker form developed by Fiedler. High scores reflect an interpersonal orientation, with the leader behaving so as to increase member satisfaction, usually in a pleasant, nondirective fashion. Low scores have been associated with greater task orientation on the part of the leader, often in a directive, punitive manner. A low degree of concern for pleasant interpersonal relations has also been related to low scores on this form. Immediate supervisors of participating entry-level PSC enrollees completed the questionnaire. Appendix E presents the questionnaire items.

Supervisor's Rating Form. To relate the impact of the PSC enrollees' world-of-work values and changes in them to actual behavior in the work environment, it was necessary that immediate supervisors rate entry-level PSC enrollees on several dimensions. The dimensions seen as being of primary importance were the worker's performance, adjustment, motivation, stability, and potential. Appendix E presents the descriptive items that were used in deriving a score for each enrollee on each dimension.

Subjects and Questionnaire Administration

First Session Subjects. To accomplish the objectives relevant to the initial data collection session, data were collected from the following subject categories:

(1) Entry-level: Individuals enrolled in Plan D of the PSC Program.
(2) Upgrade component: Individuals with prior experience in Federal employment enrolled in the upgrade portion of the PSC Program.
(3) Equivalent positions: Individuals in Federal employ having jobs and income similar to entry-level enrollees.

For each classification, the following numbers of subjects were drawn from each designated location:

Entry	Upgrade	Equivalent	Location
123	75	83	Washington, D.C. area
69			Baltimore, Md.
37			White Sands, N.M.
99			Fort Ord, Calif.
	31		Pensacola, Fla.

Insofar as was possible, data were collected from entry-level participants immediately subsequent to their enrollment in the PSC Program. The majority were seen the first week after entry into the program.

Second Session Subjects. In accomplishing the remaining objectives, data were collected from (a) enrollees in entry-level jobs who had participated in the initial session and (b) immediate supervisors of such enrollees. For each category, the following numbers of subjects were drawn from each location:

Entry-Level	Supervisors	Location
92	72	Washington, D.C. area
61	34	Baltimore, Md.
37	26	White Sands, N.M.
21	5	Fort Ord, Calif.

Administration. For each session, questionnaires were administered to subjects in groups of from 10 to 15. The majority of the subjects completed the questionnaires within one hour.

While the actual term of the PSC enrollees' employment with the Federal Service varied at the time of their participation in the second data collection session, the average length of service was approximately six months.

Supervisor questionnaires were distributed on an individual basis, with the respondent completing and returning the questionnaire.

Format and Methodology

The goals and values section and the psychological tests section of the PSC Enrollee Questionnaire had two response formats: (a) Likert-type response, and (b) forced-choice response. A description of the methodology used in the administration of these and the other sections follows.

Goals (Rating Form for Jobs): Likert-Type Response Condition. Respondents were required to rate each of the 32 goals by choosing one of five numbers on an importance scale. Following are the four types of ratings obtained for each goal, the rating scale used, and the interpretations given each alternative.

(1) Value of the goal to the worker.

Very Important	Pretty Important	Important	Not Very Important	Not Important At All
5	4	3	2	1

(2) Value of the goal to the worker's best friend.
The same rating scale was used.

(3) The worker's expectation of achieving that goal if he tries.

Much More Likely		More Likely		Not Much More Likely
5	4	3	2	1

(4) The level of effort perceived as necessary to achieve the goal.

Hard As I Can				Work Pretty Hard					No Effect (Part of Job)
10	9	8	7	6	5	4	3	2	1

Goals (Rating Form for Jobs): Forced-Choice Response Condition. For their ratings of the value of each goal (a) to themselves and (b) to their best friend, the respondents were presented with 50 pairs of items and required to choose one item from each pair. Because of the number of goals, it was considered impractical to develop a complete paired-comparison questionnaire. Instead, an incomplete paired-comparison approach was used. To derive a rating of value for each goal, the number of times each goal was chosen in preference to the goal with which it was paired was multiplied by five. The resulting product was divided by the number of comparisons in which the goal had appeared, which result was taken to represent the value rating for that goal (maximum score = 5).

For ratings of the level of effort required to achieve the goal, and the expectancy of achieving it, the same forms as in the Likert-type response condition were used.

Job Satisfaction. Negative and positive items pertaining to each of the five job areas covered in the Job Description Index were presented. The respondent indicated which items best described his job by recording a Y if the item was like his job, an N if the item did not fit his job, or a ? if he was undecided. The responses and the values corresponding to each were as follows:

Yes to a positive item	3
No to a negative item	3
? to any item	1
Yes to a negative item	0
No to a positive item	0

The values for each item within an area were then summed to derive a satisfaction measure for that aspect of the respondent's job, with a larger score reflecting greater satisfaction with that area.

Psychological Tests: Likert-Type Response Condition. Respondents were required to rate each of the 70 intermingled items comprising 14 psychological tests in terms of their agreement with a statement of the item. The agreement scale and the values corresponding to each alternative were as follows:

Agree very much	Agree pretty much	Agree a little	Disagree a little	Disagree pretty much	Disagree very much
6	5	4	3	2	1

The scale forces respondents to record a definite positive (agree) or negative (disagree) response for each item, that is, there was no scale position for neutral or "undecided" responses.

A forced-choice response format was used for the Orientation Toward Work test in both Likert-type and forced-choice conditions.

Psychological Tests: Forced-Choice Response Condition. In ratings used in the 14 psychological tests, each respondent was presented with 56 pairs of items and required to choose one item from each pair. One point was assigned for each alternative that represented the test dimension.

Assessment of Supervisory Influences. PSC enrollee respondents were required to rate 30 descriptions of supervisory behavior by choosing one from a row of five letters at the end of the statement of each behavior. The respondents rated the behavior on the basis of how well the statement described their immediate supervisor. The score for each dimension, Consideration and Initiation of Structure, was the sum of scores assigned each item within that scale. The interpretation given each response alternative and the weights for each were:

A	Your supervisor is always like this.	5
B	Your supervisor is often like this.	4
C	Your supervisor is like this on occasion.	3
D	Your supervisor is seldom like this.	2
E	Your supervisor is never like this.	1

Inventory for Supervisors (LPC Scale). The supervisors responded to 16 pairs of bi-polar adjectives; one member of each pair represented a positive and the other member a negative characteristic. In the eight spaces between each pair of terms, the supervisor marked the one that best described his least preferred co-worker. The sum of the ratings given each rating scale represented the supervisor's score, (each space having been assigned a value from 1 to 8 in sequence).

Supervisor's Rating Form. Supervisory respondents rated 25 employee descriptions by choosing one from a row of five numbers at the end of the statement of each description. The respondents rated each statement on the basis of how well it described (a) each of their PSC entry-level subordinates and (b) their average non-PSC subordinate. The score for each rating scale was the sum of scores assigned each item within that scale. The interpretation given each response alternative is listed.

1 Disagree very much; the description does not fit this person at all.
2 Disagree; while the description does not fit this person exactly, there are some similarities.
3 Can't say; for some reason you don't know whether or not the description fits this person.
4 Agree; the description fits this person fairly well.
5 Agree very much; the description really fits this person.

ANALYSIS

For Session I, the analysis was based on the existence of 12 different categories of subject classification, based on (a) program enrollment and component (entry-level, upgrade, or equivalent), (b) sex of subject, and (c) response condition (Likert-type or forced-choice). For each of these separate subgroupings of subjects, value category scores were computed as well as scores for each goal and for the psychological tests.

For Session II, entry-level PSC subjects who were followed-up were analyzed by session number (I vs. II) as well as by sex and response condition.

Appendix A shows the goals by value category. Within each category of subjects, a score for a value category is the mean of individual scores for all goals subsumed by that category. The use of means was necessary for comparisons between value categories because of the unequal numbers of goals within categories.

For data relevant to the supervisor-subordinate aspect of the project (Session II), the analysis was based on (a) sex, (b) classification of subject (supervisor or subordinate), and (c) ethnic group of respondent.

PSC Enrollee Questionnaires

Session I: Descriptive statistics (mean and standard deviation) were computed for each classification of subjects with respect to (a) each of the 32 goals, (b) the eight value categories, (c) each of the five job areas of the JDI, and (d) the 14 psychological tests. These statistics are presented in Appendices F-L, by session number.

Statistical comparisons took the form of:

(1) *t* tests between appropriate subject classifications for (a) value scores for each goal, (b) scores assigned each value category, (c) each JDI area, and (d) each psychological test.

(2) An analysis of variance within each of the response conditions. In the comparison of entry, upgrade, and equivalent subjects' ratings of value categories, only data for females were used because the small number of subjects in other classifications rendered comparisons unreliable. A repeated measures design was used for each analysis, with a least-squares solution being used because of the unequal cell frequencies.

Session II: Descriptive statistics (mean and standard deviation) were computed for each classification of PSC enrollee subject with respect to (a) each of the 32 goals, (b) the eight value categories, (c) each of the five job areas of the JDI, (d) the 14 psychological tests, and (e) each of the two Assessment of Supervisory Influences subscales. The statistics for (a) through (d) are presented in Appendices F-L, by session number. The statistics for (e) appear in Appendices M and N.

Statistical comparisons for the PSC Enrollee Questionnaire took the form of *t* tests between the subject classifications of sex and data collection session for (a) value scores for each goal, (b) scores assigned each value category, (c) each JDI area, and (d) each psychological test (Appendices F-L). A second comparison between data collection sessions on the rank ordering of scores assigned each value category and each goal was accomplished through use of the Spearman rank order correlation procedure.

Supervisor's Rating Form

For the data collected from supervisors, descriptive statistics for each of the five subscales in the Supervisor's Rating Form were computed separately for the average non-PSC subordinate and the PSC entry-level subordinates. These statistics are presented in Appendices O and P, respectively. Because the supervisors did not have equal numbers of subordinates, mean ratings were used for those supervisors reporting multiple PSC enrollee subordinates.

Comparisons between supervisors classified on the basis of sex and ethnic group for the rating assigned for PSC entry-level subordinates and average non-PSC subordinate took the form of *t* tests for each of the five subscales of this form (Appendices O and P).

Additionally, *t* tests were used in comparing the ratings assigned the average non-PSC subordinate and PSC entry-level subordinates as a function of sex and ethnic group of the supervisor (Appendix Q).

Inventory for Supervisors

For the Inventory for Supervisors (LPC scale), the overall mean score was used to dichotomize the supervisory respondents. Comparisons in the form of *t* tests were then made between the high and low LPC groups on each of the five subscales of the Supervisory Rating Form for the rating assigned the PSC entry-level subordinates (Appendix R).

Assessment of Supervisory Influences

PSC entry-level enrollees in Session II and participating supervisory personnel were classified on the basis of sex and ethnic group. Comparisons between the ratings assigned the supervisor on the scales measuring Consideration and Initiation of Structure for each appropriate subject classification were in the form of *t* tests (Appendices M and N).

Goals of Best Friend

The subjects in Sessions I and II rated the 32 goals as they felt their best friend would. Within each subject classification a Pearson product moment correlation (r) was computed between the two sets of ratings elicited from each subject. The mean r was computed, using Fisher's z transformation.

Interrelationships of Selected Forms

Pearson product moment correlations were computed between the following variables:

(1) The Job Description Index area of Satisfaction with Supervision, and Assessment of Supervisory Influences, and Inventory for Supervisors.

(2) Scores on each of the five subscales of the Supervisory Rating Form and the average mean difference score between Session I and Session II for each of the eight value categories, by response format for PSC entry-level subjects.

Reliability

A reliability coefficient for each value category, psychological test, and JDI area was computed for each response format. The test-retest method was used with a three-week time interval separating the two test periods. These data were collected in Pensacola, Florida, and Baltimore, Maryland.

Factor Analysis

A Principal Components Analysis with Varimax rotation was used to factor analyze the rating form comprised of the 32 goals. Factor scores (estimated by the sum of test scores for an individual, weighted by factor loading) were constructed, and were correlated with each of the 14 psychological tests.

Summary of Test Components and Interpretation

To facilitate interpretation of the data presented in Chapter 3 concerning the questionnaire administration during the project, descriptions and maximum scores are given in Table 2.

Table 2

Maximum Test Scores and Interpretations

Name of Section or Test	Maximum Score		Interpretation
	Likert-Type	Forced-Choice	
Goals Rating Section	5	5	The higher the number, the greater the value placed on the goal.
Job Description Index			The higher the number, the greater the satisfaction with that aspect of the job.
Work	54	54	
Supervision	54	54	
Pay	24	24	
Promotions	27	27	
Co-Workers	54	54	
Psychological Tests[a]			
Cynical Distrust of People	36	4	The greater the score, the less willing the respondent is to enter trusting relationships with other people.
Cynical Distrust of Organizations	30	4	The greater the score, the less faith the respondent has in the integrity of organizations and the lower the likelihood of his adjusting successfully to the work environment.
Weak Self-Regard	30	5	The greater the score, the more negative the respondent's attitude toward himself, the lower the self-regard.
Achievement Motivation	42	6	The greater the score, the more the respondent values, and is interested in, relative status achieved through occupational means.
Time Sense	48	5	The larger the score, the greater the ability and/or desire of the respondent to delay gratification of immediate needs in order to obtain gratification of more central needs at a later time.
Protestant Ethic	36	6	The greater the score, the more the respondent values work in and of itself. The more work in general is valued, the greater the likelihood of the respondent adjusting successfully to the work environment.

(Continued)

Table 2 *(Continued)*

Maximum Test Scores and Interpretations

Name of Section or Test	Maximum Score		Interpretation
	Likert-Type	Forced-Choice	
Expectation of Success	36	4	The larger the score, the greater the respondent's subjective probability of attaining desired goals. The higher score reflects a generalized expectancy of success in attaining any goal.
Powerlessness	24	2	The higher the score, the more the respondent feels he has little control over the forces that determine the outcomes in his life.
Meaninglessness	24	2	The larger the score, the more the respondent feels that his work is only a means of achieving immediate goals, the less meaningful he sees his work to be.
Normlessness	30	2	The greater the score, the more the respondent feels that some goals cannot be attained by means of socially approved behavior.
Value Isolation	18	2	The higher the score, the more the respondent feels himself isolated from the majority of society and the goals they value.
Self-Estrangement	30	3	The larger the score, the lower the respondent's willingness and potential for initiating exchange with others, reflecting his lack of trust in both their motives and them.
Work Demands	36	5	The higher the score, the greater the respondent's desire to hold a job in which the expectations are both explicitly stated and stable.
Orientation Toward Work	6	6	The greater score reflects a lower concern by the respondent with "middle-class" values.

(Continued)

Table 2 *(Continued)*

Maximum Test Scores and Interpretations

Name of Section or Test	Maximum Score		Interpretation
	Likert-Type	Forced-Choice	
Assessment of Supervisory Influences[b]			The larger the score, the more the respondent believed that his supervisor exhibited such behavior.
Consideration	75	75	
Initiation of Structure	75	75	
Inventory for Supervisors[c]	120	120	High scores reflect the leader behaving so as to increase member satisfaction. Low scores indicate a low degree of concern for pleasant interpersonal relations.
Supervisor's Rating Form[d]			The higher the score, the more the supervisor believed that dimension characterized the subordinate being rated.
Performance of the worker	25	25	
Adjustment of the worker	25	25	
Motivation of the worker	25	25	
Stability of the worker	25	25	
Potential of the worker	25	25	

[a] See Appendix S for identification of questionnaire items in each psychological test.

[b] See Appendix D for listing of items within each dimension.

[c] See Appendix E for listing of items within inventory.

[d] See Appendix E for items within each dimension.

Chapter 3

RESULTS

The results are presented in the following sequence. First, the results of the reliability measurement of the various sections of the PSC Enrollee Questionnaire are summarized. Next, results of the Session I data collection effort are briefly covered. Then Session II results are reviewed, and comparisons are made with Session I. Results of the supervisor-subordinate rating questionnaires, and a discussion of the observed relationships between the scales used in Session II follow. The last part of this Chapter shows the results of the factor analysis performed on the values section of the PSC Enrollee Questionnaire.

RELIABILITY RESULTS

The reliability coefficients for each value category, psychological test, and Job Description Index area are shown in Tables 3, 4, and 5, respectively, by response condition. Data used in computation of the coefficients were obtained through the test-retest method, with three weeks elapsed time between testing sessions.

As is shown in Table 3, for the forced-choice condition, reliabilities for measures of each value category range from negligible (.03) to a high value (.55) that is still short of

Table 3

Value Category
Reliability Coefficients

Value Category	Response Condition	
	Likert-Type (N = 57)	Forced-Choice (N = 68)
I Extrinsic Benefits	.56**	.33**
II Intrinsic Benefits	.46**	.37**
III Gratification Demands	.58**	.55**
IV Interpersonal Relations With Co-Workers	.61**	.52**
V Interpersonal Relations With Supervisor	.55**	.03
VI Interpersonal Relations With Family	.39**	.26*
VII Interpersonal Relations With Friends	.73**	.18
VIII Developmental Needs	.44**	.39**

$^{*}p < .05$; $^{**}p < .01$.

Table 4

Psychological Test
Reliability Coefficients

Psychological Test	Response Condition	
	Likert-Type (N = 57)	Forced-Choice (N = 68)
Cynical Distrust of People	.64**	.76**
Cynical Distrust of Organizations	.53**	.52**
Weak Self-Regard	.63**	.62**
Achievement Motivation	.52**	.38**
Time Sense	.64**	.31*
Protestant Ethic	.48**	.61**
Expectation of Success	.51**	.62**
Powerlessness	.56**	.22
Meaninglessness	.44**	.19
Normlessness	.64**	.67**
Value Isolation	.51**	.60**
Self-Estrangement	.67**	.31*
Work Demands	.72**	.59**
Orientation Toward Work	.52**	.61**

$^{*}p < .05$; $^{**}p < .01$.

Table 5

Job Description Index
Reliability Coefficients

JDI Area	Response Condition[a]	
	Likert-Type (N = 57)	Forced–Choice (N = 68)
Satisfaction With Work	.61**	.68**
Satisfaction With Supervision	.59**	.48**
Satisfaction With Pay	.66**	.59**
Satisfaction With Promotions	.74**	.41**
Satisfaction With Co-Workers	.55**	.57**

$^{**}p < .01$

[a] The same JDI was administered in both response conditions. Response condition here refers to the format of the other sections of the PSC Enrollee Questionnaire.

what is needed for individual measurement. For Likert-type response conditions, reliabilities range from .39 to .73. These values, while higher than those associated with forced-choice, are generally too small for individual measurement.

Inspection of Table 4, Psychological Tests, indicated that most of the reliability coefficients for both response conditions were of a marginal level for use in individual measurement. There were five coefficients in the forced-choice condition that were too low for much emphasis to be placed on the corresponding psychological tests. Two coefficients in the Likert-type condition were unacceptable.

Considering the 22 reliability coefficients in Tables 3 and 4, in 16 instances the Likert-type condition was associated with larger coefficients than were observed in the corresponding forced-choice forms. This difference can be attributed to a variety of factors (including response set and ease of recall for first response). Most significant, psychometrically, is that the forced-choice forms comprised fewer items and each item provided less information (i.e., being a ranking of two items rather than a full-scale rating).

The JDI was administered in the same form for both Likert-type and forced-choice conditions. Reliability coefficients for the JDI (Table 5) generally fall below the .7 to .8 range, which is considered as the lower bounds of the reliability of the JDI by its authors (Smith, *et al.*, 1969). The discrepancies between reliability coefficients for several areas of the JDI are difficult to understand.

In Section 1 (goals) of the questionnaire, an incomplete paired-comparisons method was used for the forced-choice condition. The low reliability coefficients associated with this section indicate that few valid interpretations can realistically be made. For this reason, results involving Section 1 of the questionnaire, forced-choice condition, will be neither discussed nor interpreted.

REVIEW OF SESSION I RESULTS

Subject Characteristics

The median age for the three subject categories of entry, upgrade, and equivalent classifications was, respectively, 25.4, 25.4, and 23.6. Mean education ranged from a low of 10.7 years to a high of 12.5 years, with only three of the 12 subject groupings having a mean number of years of education lower than 11.0.

Comparisons of Subject Groups by Value Category

While no significant differences between entry, upgrade, and equivalent personnel were found for the value category scores, several significant differences were found within groups.

Two differences involved comparisons between entry males and entry females in the Likert-type condition. The significant comparison in the forced-choice condition indicated that entry males rated the goals subsumed by Gratification Demands higher than did entry females.

Comparisons of Value Categories

As a follow-up of the analysis of variance performed for the female subjects within each of the three subject groupings, the Newman-Keuls procedure indicated highly significant differences between most mean value category scores. For both response conditions, the relative orders of the eight value categories indicated the most highly valued outcomes of work were Intrinsic Benefits and Self Development. At the other end of the ranking, the two categories standing lowest were Gratification Demands and Interpersonal Relations With Friends.

In summary, the females (and probably also the males) appeared to be discriminating between the world-of-work and the world of non-work, and to be making discriminations that would be judged adaptive and characteristic of higher socioeconomic individuals than was originally anticipated would be enrolled in the PSC Program.

Goals Comparisons

For the between-groups comparisons in both the forced-choice and the Likert-type conditions, several significant differences were found between entry-level and at least one of the other two classifications.

The following significant differences were observed in the Likert-type conditions.

Goals	Direction of Value Comparisons	
A good vacation each year	entry male	> upgrade male
Feeling proud of your job	entry females	> equivalent females
A supervisor who is willing to help you with your off-the-job problems	entry females	> upgrade females
Being something you can talk to your friends about after work	upgrade females	> entry females
Being able to learn to do something that is really hard	upgrade females	> entry females

For the within-group comparisons in the Likert-type condition, 13 were significant, with 10 of these occurring between entry males and females. These significant differences were as follows:

Goals	Direction of Value Comparisons	
A good vacation each year	entry males	> entry females
A good retirement plan	upgrade males	> entry females
A good hospitalization plan	entry male	> entry female
A plan to pay doctor's bills	entry males	> entry females
Feeling proud of your job	entry females	> entry males
Being able to buy a lot of new things	entry males	> entry females
Being able to buy things I need	entry males	> entry females
Being able to talk and have fun with the people working there	entry males	> entry females
A supervisor who is willing to help you with off-the-job problems	upgrade males	> upgrade females
Knowing your friends respect you for the work you do	entry males upgrade males	> entry females > upgrade females
Having a job that is interesting to your friends	entry males	> entry females
Being something you can talk to your friends about after work	entry males	> entry females

The greater number of significant results, for the within- as compared with the between-groups comparisons, strongly suggests that sex differences were more important than group differences.

Job Description Index

Work. Entry females were more satisfied (or expected to be) with their work than were upgrade females. Both upgrade and equivalent females were less satisfied than was the normative group (Smith, *et al.*, 1969), as were entry males.

Supervision. Entry males were significantly less satisfied than either the upgrade or the normative group, while not differing from the equivalent group.

Pay. All groups expressed little satisfaction with this job factor.

Promotion. Both entry and upgrade males were significantly lower than the normative group. Entry females and the normative group did not differ and were significantly more satisfied than either the upgrade or the equivalent females.

Co-Workers. Entry males were significantly lower than either upgrade males or the normative group. Entry-level and upgrade females were both lower than the normative group.

Psychological Tests

The following significant differences were found.

Response Condition/Test	Direction of Difference	Interpretation of Larger Score
Forced-Choice		
Work Demands	equivalent females > upgrade females	Greater desire for a stable, routinized job
Orientation Toward Work	equivalent females > entry and upgrade females	Greater concern for "middle-class" values
Likert-Type		
Cynical Distrust of People	upgrade females > upgrade males	Greater cynical distrust of people
Achievement Motivation	upgrade males > upgrade females	Greater value placed on relative status obtained through occupational means
Expectation of Success	entry females > entry males	Greater subjective probability of attaining a desired goal
Normlessness	upgrade females > upgrade males	Greater feeling that some goals cannot be attained by means of socially approved behavior
	entry males > upgrade males	
	upgrade females > entry females	
Work Demands	entry females > entry males	Greater desire for a stable, routinized job
	entry females > equivalent females	

Again, as has been the case with the other measures reported earlier, differences between groups appear to be minimal in the present sample. Those that were found appeared perhaps to be governed as much by sex differences as by occupational level differences.

Discussion

The most striking feature of the Session I results was the similarity between the responses of subjects, irrespective of group. Two factors might underlie such observed similarity, either individually or in combination—an actual similarity between the subjects, or a questionnaire containing scales having little validity. The most cogent reasons for attaching minimal weight to the latter possibility are (a) examination of the results of the Job Description Index (in which only eight of the 25 significant comparisons were between classifications) and (b) general agreement between this pattern of results for both the JDI and the remaining scales and tests used in this project. The validity of the JDI itself has been addressed by numerous researchers (e.g., Smith, *et al.*, 1969) and found to be quite adequate.

The most valued outcomes of work for all three groups were Intrinsic Benefits and Self Development. The least valued outcomes were Gratification Demands and Interpersonal Relations With Friends.

In the comparisons between the entry-level and the other groups on ratings of goals, only five of the 32 goals were significant, reflecting very few differences between the values held by each group. Interestingly, entry females valued the goal of Feeling Proud of Your Job more than did equivalent females, but valued less the goal of Being Able to Learn to do Something That is Really Hard than did upgrade females. However, entry females felt more strongly about a Supervisor Who is Willing to Help You With Your Off-The-Job Problems than did upgrade females.

Goal comparisons made between sexes within a group revealed stronger sex than group effects for this sample, especially for the entry-level. Ten of the 13 significant comparisons between sex were at the entry-level. Generally, entry males were more concerned with the purchasing power afforded by their jobs, fringe benefits, and their friends' acceptance and esteem than were the entry females. Upgrade males were more concerned both with having the respect of their friends and with having a supervisor who was available for off-the-job problem assistance than were the upgrade females.

Entry females expressed less concern for "middle-class" values than did their equivalent counterparts. Entry females also expected to be more successful than did entry males, although they did not feel as strongly as upgrade females that many goals cannot be obtained by means of socially approved behavior. Entry females were also more desirous of stable routinized jobs than were entry males, and expressed a greater expectation of being satisfied by their jobs than was reported by upgrade females. Entry males did not feel the same way, anticipating a relatively lower level of satisfaction from the work itself. Entry males also anticipated less satisfaction with the supervision they would receive than was reported by the upgrade males. None of the groups was satisfied with the pay received.

Entry males anticipated, and upgrade males and females reported, low levels of satisfaction with promotion, while entry females anticipated being satisfied with future promotions. Entry males and females anticipated, and upgrade females reported, relatively lower levels of satisfaction with their co-workers than did upgrade males.

Overall, and of positive value from the viewpoint of the PSC Program, subjects participating in this study seem well socialized with respect to the "middle-class value system," seem desirous of adequately performing work which they feel is meaningful and interesting, will work at lower salary levels to obtain such work, and accept socially approved methods of obtaining goals.

The high level of motivation of the entry-level subjects and the degree of congruence between their values and those of the other two groups provide basis for the inference that entry-level enrollees are underemployed since many higher-level jobs would not require special skills. The upgrade workers are employed several levels above the jobs made available to PSC entrants. Relatively rapid promotions, which are not likely, will be needed to minimize the impact of underemployment upon the job motivation and performance of the entry-level subjects. One factor that may lessen this impact is the possibility that a job with the Federal government is viewed as highly desirable. The security, stability, and fringe benefits associated with such a job may well be the deciding factor in the enrollees' decision to remain in, or leave, their jobs.

REVIEW OF SESSION II RESULTS AND COMPARISONS WITH SESSION I

Subject Characteristics

There were 328 entry-level subjects who participated in Session I; 211 of these subjects also participated in Session II. Comparisons of the entry-level subjects' ages and educational levels between sessions are presented in Tables 6 and 7, respectively. In a small percentage of cases, source data were missing in the questionnaire replies.

Although the decrease in the number of subjects between sessions represented a 35.6% attrition rate, the sources of the attrition warrant analysis. Fort Ord was the primary location of the loss, accounting for about two-thirds of the reduction. The Washington, D.C. area attrition represented about one-fourth of the total loss. These might seem to be high attrition rates. However, for Fort Ord only four of the Session I subjects who did not participate in Session II were terminated for reasons other than a cut in funds or a termination of the job itself. Of the 78 not participating in Session II, only 14 had resigned. Closer examination of the Washington, D.C. area sample shows a

Table 6

Frequency Distribution of Subjects' Ages, by Sex and Ethnic Group for Sessions I and II[a]

Age Interval	Session I				Session II			
	Male		Female		Male		Female	
	White	Black	White	Black	White	Black	White	Black
17-20	13	10	4	29	2	11	3	20
21-25	52	29	4	33	25	11	3	28
26-30	8	7	2	20	8	4	2	17
31-35	9			11	3			11
36-40	6	2	3	13	5	1	2	13
41-45	6	4	2	6	3	4	3	6
46-50	11	1	1	5	7		1	4
51-over	13	7	3	5	3	2	2	5

[a] A member of the HumRRO research staff made ethnic group classifications on the basis of personal observations.

Table 7

Frequency Distribution of Subjects' Education, by Sex and Ethnic Group for Sessions I and II[a]

Educational Level	Session I				Session II			
	Male		Female		Male		Female	
	White	Black	White	Black	White	Black	White	Black
5		1		2				2
6				1				1
7	3			2	1	1		2
8	4	2		3	5	2		3
9	4	5	7	14	1	2	5	11
10	8	7	2	21	4	3	1	20
11	15	6	2	19	5	4		18
12	64	25	4	43	34	13	6	31
13	3	3	1	2	1	1	2	1
14	7	3	1	1	2	1		1
15	1							
16	2							

[a] A member of the HumRRO research staff made ethnic group classifications on the basis of personal observations.

variety of reasons for the discrepancies in sample size. The data available for 29 of the 31 not participating in Session II:

Basis for Non-Participation	Number
Transferred	3
Promoted	1
Resigned	16
Leave	4
Terminated	3
AWOP/AWOL	2

While some of those who resigned probably did so in preference to termination, on the basis of these break-outs it would seem that PSC enrollees have a low attrition rate (31/153 = 20%) appreciably lower than had been expected.

Value Category Comparisons

To determine whether any changes had occurred during the elapsed time as to the relative order of preference for each value category, Spearman rank order correlations (*rho*) were computed for each sex and response condition grouping (Table 8). The ranking was based on the mean rating of value category by group under Likert-type and forced-choice conditions (Tables 9 and 10).

While the consistency of the order of preference for the value categories is amply demonstrated by the magnitude of the computed *rhos*, some interesting shifts occurred.

Table 8

Rank Correlations[a] for Value Categories by Session and Sex

Classification	Response Condition	
	Likert-Type	Forced-Choice
Males: Session I vs. Session II	.90	.97
Females: Session I vs. Session II	.88	.91
Session I: Males vs. Females	.80	1.00
Session II: Males vs. Females	.91	.96

[a] Spearman *rho*

Table 9

Mean Rating and Rank of Value Categories, by Session and Sex: Likert-Type Condition

Value Category	Session I				Session II			
	Male		Female		Male		Female	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
I Extrinsic Benefits	4.3	2	3.9	5	4.1	3	4.1	3
II Intrinsic Benefits	4.6	1	4.5	1	4.4	1	4.4	2
III Gratification Demands	3.6	7	3.5	7	3.3	7	3.4	6
IV Interpersonal Relations With Co-Workers	4.0	5.5	3.6	6	3.7	5	3.4	7
V Interpersonal Relations With Supervisor	4.0	5.5	4.1	3	3.8	4	3.9	4
VI Interpersonal Relations With Family	4.0	4	4.0	4	3.5	6	3.6	5
VII Interpersonal Relations With Friends	3.3	8	2.6	8	2.9	8	2.7	8
VIII Developmental Needs	4.2	3	4.3	2	4.2	2	4.4	1

A higher rank was given the value category of Developmental Needs in Session II than in Session I by both entry males and females. With one exception (female, Likert-type condition), the preference rank for Intrinsic Benefits remained the same for both sessions, and only dropped one rank for that group.

Again with one exception (males, Likert-type condition), the preference rank for Extrinsic Benefits was increased by each subject classification, with the drop for the males (Likert-type) being only one rank.

As in Session I, of the three most preferred value categories, the two that were common to all subject groupings were Intrinsic Benefits and the opportunity for Self Development. The items categorized into the Intrinsic Benefits area reflected "the work

Table 10

Mean Rating and Rank of Value Categories, by Session and Sex: Forced-Choice Condition

Value Category	Session I				Session II			
	Male		Female		Male		Female	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
I Extrinsic Benefits	2.3	6	2.2	6	2.3	5.5	2.2	5
II Intrinsic Benefits	3.6	3	3.7	3	3.5	3	3.5	3
III Gratification Demands	1.6	7	2.1	7	1.8	7	2.1	6
IV Interpersonal Relations With Co-Workers	2.4	5	2.5	5	2.3	5.5	2.1	7
V Interpersonal Relations With Supervisor	2.7	4	3.0	4	2.9	4	3.0	4
VI Interpersonal Relations With Family	3.9	1	4.0	1	3.6	2	3.8	2
VII Interpersonal Relations With Friends	1.2	8	.9	8	.8	8	.7	8
VIII Developmental Needs	3.9	2	3.7	2	3.8	1	4.1	1

itself" in the Herzberg sense. Items in the Developmental Needs category, while similar, tended to reflect achievement as opposed to the content of work. Significantly, these two categories were quite high in the relative ordering of value categories, regardless of methodology.

Across response format, the two categories standing lowest in relative ordering were Gratification Demands and Interpersonal Relations With Friends. The category of Gratification Demands was included in the taxonomy partly to test the hypothesis that the marginal workers expected to be PSC enrollees would be significantly lower on ability to defer such demands than equivalent and upgrade personnel, and that, for them, this category would be found relatively high in the ordering of categories. That it was not, and that it fell toward the very bottom of the ordering of value categories for all response groups, suggests that subjects in the present study are responding in a manner that would have been expected of subjects at a considerably higher socioeconomic level, at least insofar as can be judged from the research literature on work goals. The same statement can be made with regard to the category of Interpersonal Relations With Friends.

Goals Comparisons

The results concerning the relative values of the specific goals comprising the value categories are presented in the following sequence: goal value differences between sessions by sex, goal value differences between sexes for Session II, preferential ordering of goals for Sessions I and II, and the relationship between the worker's goal preferences and those attributed to his best friend.

Tables 11 and 12 present the mean value rating for each goal by subject classification (combined), session, and response condition, as well as preferential orderings of goals. The mean values in these tables are based on the total entry-level subjects participating in the study at each session point. The descriptive statistics for the

Table 11

Mean Value Ratings for Each Goal, by Session: Likert-Type Condition

Goals	Session I		Session II		Rank Ordering of Goals	
	Male (N = 67)	Female (N = 49)	Male (N = 48)	Female (N = 57)	Session I[a]	Session II[a]
1. Good pay	4.6	4.4	4.6	4.4	8	6
2. Good working conditions, like air conditioning	3.7	3.3	3.3	4.1	24	20
3. A good vacation each year	4.3	3.4	3.9	3.9	19	17
4. A good retirement plan	4.5	4.2	4.4	4.2	10	7
5. Being able to work close to home	3.8	3.5	3.6	3.5	22	22
6. A good hospitalization plan	4.5	3.9	4.2	4.2	12	12
7. A plan to pay doctor's bills	4.2	2.9	4.2	4.1	23	14
8. Being able to keep the job as long as you want	4.6	4.6	4.4	4.7	4	2
9. Being able to take pride in what you do	4.6	4.5	4.1	4.2	6	13
10. Being able to do the type work you always wanted to do	4.5	4.5	4.5	4.5	7	5
11. Knowing there is a good chance of being promoted	4.7	4.6	4.5	4.5	2	3
12. Feeling proud of your job	4.3	4.6	4.1	4.3	9	11
13. A lot of time off without losing pay	2.9	2.9	2.5	2.8	29	31
14. Being able to buy a lot of new things	3.1	2.6	3.0	2.8	30	28
15. Being able to buy things I have always wanted	3.5	3.4	3.3	3.4	27	24
16. Being able to buy things I need	4.3	3.8	4.0	4.0	14.5	15
17. Being able to work with people who think my work is good	4.2	3.9	3.8	3.9	13	18
18. Being able to work with people who like me	4.0	3.6	3.5	3.4	20	23
19. Being able to work with people who are friendly	4.2	4.3	4.5	4.1	11	8
20. Being able to talk and have fun with the other people working there	3.7	3.2	3.4	2.9	26	27
21. Being able to work with people who think as much of me as my friends do	3.7	3.3	3.4	3.0	25	26
22. A supervisor who is friendly	4.0	4.1	3.7	4.0	14.5	19
23. A supervisor who treats everyone fairly	4.5	4.6	4.4	4.2	5	9

(Continued)

Table 11 *(Continued)*

Mean Value Ratings for Each Goal, by Session: Likert-Type Condition

Goals	Session I		Session II		Rank Ordering of Goals	
	Male (N = 67)	Female (N = 49)	Male (N = 48)	Female (N = 57)	Session I[a]	Session II[a]
24. A supervisor who tells you when you have done a good job on something	3.9	4.1	3.9	4.0	16.5	16
25. A supervisor who helps when you need help	4.6	4.7	4.5	4.5	3	4
26. A supervisor who is willing to help you with your off-the-job problems	3.0	3.0	2.7	2.6	28	30
27. Knowing your family is proud of the work you do	4.0	4.0	3.5	3.6	16.5	21
28. Knowing your friends respect you for the work you do	4.1	3.2	3.5	3.1	21	25
29. Having a job that is interesting to your friends	2.7	2.0	2.5	2.5	32	32
30. Being something you talk to your friends about after work	3.1	2.4	2.7	2.6	31	29
31. Being able to learn new things that will help you get a better job later	4.6	4.7	4.7	4.8	1	1
32. Being able to learn to do something that is really hard	3.9	3.9	4.5	4.1	18	10

[a]Male and Female.

Table 12

Mean Value Ratings for Each Goal, by Session: Forced-Choice Condition

Goals	Session I		Session II		Rank Ordering of Goals	
	Male (N = 71)	Female (N = 65)	Male (N = 41)	Female (N = 64)	Session I[a]	Session II[a]
1. Good pay	2.1	1.9	2.1	2.1	20	21
2. Good working conditions, like air conditioning	1.2	1.3	1.1	1.1	29	27
3. A good vacation each year	2.2	3.2	2.4	2.1	16	18
4. A good retirement plan	3.1	3.0	3.1	3.2	11	11
5. Being able to work close to home	2.4	2.3	2.0	1.9	19	22
6. A good hospitalization plan	3.5	2.9	3.4	3.6	7	7
7. A plan to pay doctor's bills	2.0	1.5	2.1	1.7	24	23

(Continued)

Table 12 *(Continued)*

Mean Value Ratings for Each Goal, by Session: Forced-Choice Condition

Goal	Session I		Session II		Rank Ordering of Goals	
	Male (N = 71)	Female (N = 65)	Male (N = 41)	Female (N = 64)	Session I[a]	Session II[a]
8. Being able to keep the job as long as you want	1.9	1.9	2.3	2.0	21	20
9. Being able to take pride in what you do	4.0	3.9	3.2	4.0	1	6
10. Being able to do the type work you always wanted to do	3.6	3.6	3.2	3.4	8	9
11. Knowing there is a good chance of being promoted	3.3	3.5	3.7	3.3	9	8
12. Feeling proud of your job	3.2	3.4	3.0	3.5	10	10
13. A lot of time off without losing pay	.6	.5	.8	.9	32	31
14. Being able to buy a lot of new things	.9	1.6	.9	1.4	28	26
15. Being able to buy things I have always wanted	1.0	1.6	1.1	1.7	26	25
16. Being able to buy things I need	2.3	3.4	3.0	3.2	13	13
17. Being able to work with people who think my work is good	2.4	2.6	2.6	2.5	17.5	16
18. Being able to work with people who like me	2.3	2.6	2.4	2.1	17.5	19
19. Being able to work with people who are friendly	4.0	3.9	3.9	3.7	2.5	4
20. Being able to talk and have fun with other people working there	1.2	1.4	.7	.7	27	32
21. Being able to work with people who think as much of me as my friends do	1.9	1.8	1.9	1.4	23	24
22. A supervisor who is friendly	3.1	2.9	2.3	2.6	12	17
23. A supervisor who treats everyone fairly	2.1	1.6	3.4	2.8	22	12
24. A supervisor who tells you when you have done a good job on something	2.3	2.9	2.8	2.7	15	14
25. A supervisor who helps when you need help	3.5	4.3	3.5	4.2	4	2
26. A supervisor who is willing to help you with your off-the-job problems	2.8	2.9	2.4	2.8	14	15
27. Knowing your family is proud of the work you do	3.9	4.0	3.6	3.8	2.5	3

(Continued)

Table 12 *(Continued)*

Mean Value Ratings for Each Goal, by Session: Forced-Choice Condition

Goal	Session I		Session II		Rank Ordering of Goals	
	Male (N = 71)	Female (N = 65)	Male (N = 41)	Female (N = 64)	Session I[a]	Session II[a]
28. Knowing your friends respect you for the work you do	1.9	.9	1.4	.8	25	28
29. Having a job that is interesting to your friends	.6	.6	.8	.4	31	30
30. Being something you can talk to your friends about after work	1.0	1.4	.3	.9	30	29
31. Being able to learn new things that will help you get a better job later	3.9	3.7	3.3	4.1	5	5
32. Being able to learn to do something that is really hard	3.8	3.6	4.4	4.0	6	1

[a] Male and Female.

entry-level enrollees' responses, based only on those persons participating in both sessions, are shown in Appendix F-1. Also shown in that appendix are the *t* values resulting from tests performed to ascertain the significance of changes over time in this particular group. These tests are the basis for the changes between sessions that are reported below. Because of the low reliability of the forced-choice goals section, only changes occurring in the Likert-type condition are reported. A *t* test for repeated measures on the same subject was used in making the comparisons shown in Appendix F-1. These *t* values can be compared to those shown in Appendix F, which refer to differences between groups.

By Sessions Comparisons. The comparisons between sessions by sex, to determine whether any changes had occurred in the value ratings of each goal, took the form of *t* tests. Because of the large number of comparisons, only *t* values equaling or exceeding the .01 level were considered to be of acceptable reliability although values at the .05 level are included in Table 13, which presents the significant comparisons between Sessions I and II for the Likert-type condition, by sex.

Only one of the comparisons made in the Likert-type condition proved to be significant at the .01 level. The males valued the goal of Being Able to Take Pride in What You Do significantly less in Session II than they had reported in Session I. With the exception of higher evaluation of A Good Vacation Each Year by females, each of the other shifts shown in Table 13 was in the direction of lower evaluation of the goal.

The decreases shown in evaluation of the goals reflect a realistic reappraisal of the job and working conditions. Preconceptions of what is necessary to make a "good" working environment may have changed as a function of job experience.

By Sex Comparisons—Session II. For the Session II results, *t* tests were conducted to determine which goals in each response condition were differentially rated by males and females. As in the previous sections, only *t* values equaling or exceeding the .01 level are considered of sufficient reliability to report.

Table 13

Goals Associated With Significant Changes Between Sessions I and II in Evaluation by Entry-Level Subjects, by Sex: Likert-Type Condition

Goal	Group	Means		t	p
		Session I	Session II		
A good vacation each year	Female	3.2	3.7	2.04	<.05
Being able to take pride in what you do	Male	4.6	4.0	3.57	<.01
Knowing there is a good chance of being promoted	Male	4.7	4.4	2.18	<.05
Being able to work with people who like me	Female	3.6	3.2	2.16	<.05
Being able to work with people who think as much of me as my friends do	Male Female	3.7 3.3	3.3 2.7	2.08 2.71	<.05 <.05
A supervisor who is willing to help you with your off-the-job problems	Female	3.0	2.5	2.59	<.05
Knowing your friends respect you for the work you do	Male	3.9	3.3	2.43	<.05

For the Likert-type condition, only one comparison yielded a significant difference. Session II females gave significantly higher value ratings to Good Working Conditions, Like Air Conditioning than did Session II males ($t = 3.47$, $p < .01$.

Within the forced-choice condition, the only comparison that reflected significant differences between Session II males and females was in the ratings assigned Being Able to Take Pride in What You Do. Females scored significantly higher than did males ($t = 3.59$, $p < .01$).

Preferential Ordering of Goals. Because the comparisons between values given to goals by Session II males and females were generally nonsignificant, the two sets of ratings were combined to obtain an overall mean rating for each goal. This overall mean was then used to rank the goals in order of their assigned values (see Tables 11 and 12). This was also done for the Session I data.

Although the Likert-type response format allowed giving maximum value ratings to each goal, subjects did discriminate among the goals. The top ranked goals reflected strivings for upward mobility (Being Able to Learn Things That Will Help You Get a Better Job Later and Knowing There is a Good Chance of Being Promoted) and a desire for job security (Being Able to Keep the Job as Long as You Want). Not only was Good Pay not ranked first, it was one rank lower than it had been in Session I, down to rank 6. This result may reflect a longer time perspective than is generally credited to the marginal worker.

The forced-choice results are presented primarily for comparative purposes and will not be described.

Goal Ratings for Respondent and Best Friend

Data were collected in both sessions to determine the similarity between each respondent's values and those attributed to his best friend. The data were in the form of the worker's value ratings of each goal for himself and for his best friend. As shown in Table 14, more than one-half the subjects who provided sufficient information to identify their best friend indicated that the best friend was different between Session I and Session II (68 vs. 51 for combined response conditions).

Table 14

Average Correlations[a] Between Ratings of Goals for Self and for Best Friend, by Sex, Session, Consistency of Relationship, and Response Condition

Relationship	Likert-Type				Forced-Choice			
	Session I		Session II		Session I		Session II	
	Male	Female	Male	Female	Male	Female	Male	Female
Same best friend for Sessions I and II								
Correlation	.71	.55	.72	.59	.65	.73	.43	.37
N	5	21	5	21	6	19	6	19
Different best friend for Sessions I and II								
Correlation	.84	.74	.94	.64	.74	.57	.60	.48
N	14	17	14	16	11	27	11	27

[a]Correlations shown in tables are, unless otherwise noted, Pearson product moment correlation coefficients.

There are several alternative explanations of the observed frequency of change. There may have been increasingly large differences between respondents and the Session I best friends' values over time, and enrollees reporting different best friends may have formed new relationships with others having more similar values. Alternatively, the shift in best friend might be due to proximity to others in the work situation, with a correspondingly lower frequency of contact with the Session I best friend. The new relationship would reflect the lower investment of effort to obtain about the same level of benefits. Insufficient data were available to rule out either inference.

Job Description Index

The Job Description Index (Smith, *et al.*, 1969) was administered in both sessions. Items used in measuring the workers' satisfaction for the five areas of work comprising the JDI (satisfaction with work, supervision, pay, promotion, and co-workers) are presented in Appendix B. Means, standard deviations, and *t* tests comparing results for Session I and Session II are presented in Appendix J. Table 15 contains, in summary form, the means obtained in both sessions for entry-level PSC enrollees, together with means provided by Smith, *et al.* (1969) for their normative sample. Attractiveness of the job is assumed to be reflected in respondents' ratings of satisfaction with each of the five job areas, the maximum score on any area being three times the number of items tapping that job area.

The several major differences between the responses of entry-level workers and those of the normative group were summarized in the review of Session I results. Comparisons to be reported here in the form of *t* tests were made between the results of Session I and Session II. Differences between the two sessions are shown by JDI area in Table 16.

Table 15

Job Description Index Means of PSC Entry-Level Workers For Sessions I and II

JDI Area	Maximum Score	Normative[a]		Session I		Session II	
		Male	Female	Male	Female	Male	Female
Work	54	36.6	35.7	29.6	34.1	32.0	32.6
Supervision	54	41.1	41.1	38.1	40.0	39.7	39.4
Pay	24	29.9	27.9	10.9	12.5	10.8	9.6
Promotions	27	22.1	17.8	16.5	18.4	16.6	15.4
Co-Workers	54	43.5	42.1	38.4	39.1	39.8	38.5

[a] Smith *et al.* (1969).

Table 16

Significant Changes Between Sessions I and II in Ratings by Entry-Level Subjects of Satisfaction on Each Area of the Job Description Index

JDI Area	Group	Extent of Change
Work	Male	No significant change
	Female	
Supervision	Male	No significant change
	Female	
Pay	Male	No significant change
	Female	Lower staisfaction level in Session II ($t = 3.64, p < .01$)
Promotions	Male	No significant change
	Female	Lower satisfaction level in Session II ($t = 3.43, p < .01$)
Co-Workers	Male	No significant change
	Female	

The general picture produced by analysis of the Session II results did not differ to any extent from Session I data; if anything, it was accentuated. The conclusion drawn from the Session I results was that the entry-level jobs held by enrollees were less desirable than the average job held by normative subjects. This conclusion was based on the generally lower degrees of satisfaction expressed by respondents participating in this study, as compared with responses of the blue-collar normative group.

The fact that the females in Session II had become even less satisfied with both pay and promotions tended to bolster this conclusion. This was especially applicable for the finding concerning satisfaction with promotions, since in Session I females had anticipated being satisfied with the promotion opportunities, to the extent of slightly exceeding the normative group in their ratings.

Psychological Tests

Means, standard deviations, and t tests for each of the 14 psychological tests included in the PSC Enrollee Questionnaire are shown in Appendices K and L. Statistics derived from responses of entry-level subjects who participated in both sessions are given in Appendix K-1, for the Likert-type response condition only.

By Sessions Comparisons. The same procedure used with the goals rating data was used for the psychological tests (Likert-type condition). Appendix K presents the descriptive statistics and t values based on the total number of entry-level subjects participating in each data collection session. There were no significant changes observed in the Likert-type condition.

In the forced-choice condition, males were significantly more motivated to achieve relative status through occupation means in Session II than in Session I ($t = 2.33$, $p < .05$; Achievement Motivation Test). Females were significantly less concerned with "middle-class" values in Session II than they had been in Session I ($t = 2.36$, $p < .05$; Orientation Toward Work Test).

Appendix K-1 shows the descriptive statistics and t values that result from only using responses of subjects participating in both data collection sessions, in the Likert-type response condition. For these results, a t test for correlated means was used. The significant results of these tests are shown in Table 17. The purpose of the alternative procedures was twofold: (a) to show any changes that had occurred over time in the entire group of enrollees, and (b) to identify any smaller changes which might have

Table 17

Significant[a] Changes Between Sessions I and II in Responses by Entry-Level Subjects to Each Psychological Test

(Based Only on Subjects Participating in Both Sessions in the Likert-Type Condition)

Psychological Test	Group	Mean		Interpretation of Change
		Session I	Session II	
Powerlessness	Male	10.1	11.8	Decreased control over their outcome was felt by males in Session II.
Meaninglessness	Male	9.3	10.4	Males saw work as being less meaningful, perceived more as only a means to immediate ends.
Self-Estrangement	Male Female	13.0 13.7	14.8 15.4	Both males and females felt less willing to initiate exchange with others, less trusting of others and their motives than had been reported for Session I.
Work Demands	Female	25.5	23.4	A greater desire was reported in Session II for a job that was less routinized and stable.
Orientation Toward Work	Male	2.6	3.2	There was a lower level of concern for "middle-class" values than had been reported in Session I.

$^{a}p < .05$.

occurred, by using only those subjects whose responses had been elicited by the same procedure in both data collection sessions.

Females were less satisfied with their jobs than were males. Both males and females were less trusting of the motives of others at the time of the second testing. The males felt less control over the outcome of their work; this may reflect a lack of viable alternatives. The general dissatisfaction of the females may indicate boredom with very structured jobs, as they desire jobs that are less stable and structured. When considered with changes in the JDI, it can be inferred that females entered the program with higher aspirations and expectations than males, and have been forced to revise their ambitions downward as a result of their realistic appraisal of the actual situation.

By Sex Comparisons—Session II. In the Likert-type condition, females scored significantly higher than males on the Self-Estrangement Test ($t = 2.21$, $p < .05$). This result reflects a lower willingness by females to initiate exchange with others. Further, such a result indicates a lower level of trust of others and their motives by females.

Results for the forced-choice condition showed that males were significantly more motivated to achieve relative status through occupational means than were females ($t = 2.25$, $p < .05$; Achievement Motivation Test). Males also expressed a greater desire for a stable, routinized job than did females ($t = 2.35$, $p < .05$; Work Demands Test).

ASSESSMENT OF SUPERVISORY INFLUENCES

Results of the questionnaire that obtained subordinates' ratings of their supervisors on two dimensions of leadership behavior, "Consideration" and "Initiation of Structure," are presented separately for each dimension. The first section compares the ratings of supervisors as a function of the sex and ethnic group of the subordinate, while the second section compares the ratings of supervisors as a function of the sex and ethnic group of the supervisor. Means, standard deviations, and *t* tests relevant to each of these sections are presented in Appendices M and N, respectively.

Ratings of Supervisory Behaviors

Consideration. There were no significant differences between sexes either within or between ethnic groups. White males gave significantly higher ratings to supervisors than did black males ($t = 2.29$, $p < .05$). White females also rated supervisors higher on Consideration than did black females ($t = 2.11$, $p < .05$). Combining across sex, whites assigned significantly higher ratings to supervisors than did blacks ($t = 2.18$, $p < .05$).

Initiation of Structure. There were no significant differences in comparisons by sex, ethnic group, or any combination of the two.

Comparison of Supervisor Ratings by Supervisor's Sex and Ethnic Group

Consideration. There were no significant differences between the ratings given supervisors on the Consideration dimension of leadership behavior as a function of sex or ethnic group, or combinations thereof, of the supervisor.

Initiation of Structure. There were no significant differences between sexes for whites, but black female supervisors were rated significantly lower than black male supervisors on Initiation of Structure ($t = 2.51$, $p < .05$). White and black male supervisors did not significantly differ in ratings received. White female supervisors were rated significantly higher than were black female supervisors on Initiation of Structure ($t = 2.59$, $p < .05$).

INTERRELATIONSHIPS OF SELECTED FORMS

Conceptually, several of the scales administered as part of Session II are related to one another. To determine the strength of the relationships among these scales, a Pearson product moment correlation was computed. The four scales selected for inclusion were: (a) the Satisfaction With Supervision area from the Job Description Index, (b) the Consideration dimension, (c) the Initiation of Structure dimension, and (d) the Least Preferred Co-Worker scale. Scales (b) and (c) were the two component parts of the Assessment of Supervisory Influences form. Results of the tests are presented in Table 18.

Table 18

Intercorrelations Among Scales Regarding Supervisors, Session II (N = 123)

Scale	(1)	(2)	(3)	(4)
(1) Satisfaction With Supervisors		.60***	.41***	.13
(2) Consideration			.44***	.10
(3) Initiation of Structure				.06
(4) Least Preferred Co-Worker[a]				

***$p < .001$

[a] Correlations involving this scale should be interpreted with reservations, as the LPC score of each supervisor was included for each of the subordinates.

The observed relationships between the Satisfaction With Supervision scale and both the Consideration and Initiation of Structure scales were interesting. The results suggest that a substantial portion of the variance associated with the Satisfaction With Supervision scale may derive from the supervisor's Consideration type of activities.

The findings are essentially in agreement with those of Nealey and Blood (1967) who found that Satisfaction With Supervision correlated .56 with Initiating Structure and .79 with Consideration for first-level supervisors. However, the relationship observed between the Initiating Structure and Consideration scales is substantially lower than that reported by Nealey and Blood for first-level supervisors (.44 vs. .70).

SUPERVISOR'S RATING FORM

In the following three sections, results are presented for (a) comparisons of supervisor ratings of subordinates as a function of the supervisor's score on the Inventory for Supervisors (Least Preferred Co-Worker Scale), Appendix R; (b) a comparison of the ratings of subordinates as a function of sex and ethnic group of the supervisor, Appendix P; (c) a comparison of the ratings assigned the PSC enrollee subordinates and the average non-PSC subordinate as a function of the supervisor's sex and ethnic group, Appendix Q. All ratings of the subordinates were obtained through use of the Supervisor's Rating Form in which the subordinate was assessed on five dimensions: performance, adjustment, motivation, stability, and potential. Means, standard deviations, and *t* tests are presented in the appendices indicated above. For all instances in which a supervisor had multiple PSC enrollee subordinates, an average rating was computed and used in all analyses.

Comparisons of Supervisor's Ratings of Subordinates as a Function of LPC Score

Scores obtained by supervisors on the LPC scale ranged from the minimum possible score of 16 to the maximum possible score of 128. The mean of the distribution was 66.3, with a standard deviation of 25.1. The group was split at the median; 66 had scores of 65 or less, and 67 had scores of 66 or greater. For purposes of analysis, these groups were considered to be Low LPC and High LPC, respectively. Distribution of supervisors by LPC score, sex, and ethnic group is shown in Table 19.

Table 19

Distribution of Supervisors on the Basis of LPC Score, Ethnic Group, and Sex[a]

LPC	White		Black	
	Male	Female	Male	Female
Low	21	17	11	16
High	25	14	5	13

[a] Insufficient information was available for classification of 15 supervisors.

Supervisors in the Low LPC group were found to have an average of 1.7 PSC subordinates, while the High LPC group had an average of 1.2 subordinates. There were no significant differences between ratings of PSC subordinates by supervisors on any of the five rating scales as a function of the supervisor's LPC score.

Comparisons of Supervisor's Ratings of Subordinates as a Function of Sex and Ethnic Group of the Supervisor

There were no significant differences in the ratings of PSC subordinates on any of the five rating scales as a function of either sex or ethnic group of the supervisor.

Comparisons of Supervisor's Ratings of PSC Subordinates and the Average Non-PSC Subordinate as a Function of Sex and Ethnic Group of Supervisor

Summaries of the mean ratings given the PSC subordinates and the average non-PSC subordinate are presented in Table 20 for each rating scale. There were no significant differences between the PSC and non-PSC ratings as a function of either sex or ethnic group of the supervisor, nor were there significant differences when all supervisor classifications were collapsed.

Table 20

Comparison of Supervisor's Mean Ratings of Non-PSC and PSC Subordinates

Subordinate Classification	Subordinate Rating Scale				
	1	2	3	4	5
Non-PSC	19.9	20.6	20.8	16.8	18.4
PSC	19.0	21.3	20.8	16.5	17.9

SUPERVISOR'S RATINGS AND INDIVIDUAL WORKER RESPONSES

One major focus of this study was to identify factors that have relevance for continued and successful employment. For that purpose, a performance measure of some kind would have been desirable as a criterion. In the present study, situational constraints dictated that supervisors' ratings substitute for performance criteria. In the following three sections, the relationships between the supervisory ratings given each worker and (a) individual difference scores between sessions on each value category, (b) individual scores on the psychological tests, and (c) individual scores for each area of the JDI are presented.

Value Category Difference Scores and Supervisory Ratings

The difference between mean scores for each value category over time (Session II score - Session I score) for each subject was determined. These difference scores were then related to the supervisor's rating of that individual on each of the five subscales of the Supervisor's Rating Form, using Pearson product moment correlations. The results are presented in Tables 21 and 22. Only two subject subgroupings contained a sufficient number of individuals within each response format to yield a correlation coefficient of acceptable reliability—the white male and the black female groups. Three correlation coefficients are presented in each cell, one for each of the following: white males (WM), black females (BF), and all subjects combined (Σ) within that response format.

Several results were noteworthy within each of the response conditions, even though the correspondence of significant relations between response conditions was low. The forced-choice results are presented only for comparison purposes, as the previously mentioned reliability level makes any interpretation dubious.

Likert-Type Response Condition. The negative relation between supervisor's ratings of worker performance and Extrinsic Benefits ($r = -.26$, $p < .05$) suggests that those individuals attaching lesser value to these goals in Session II were seen by their supervisors as better performers. The second value category that bore a significant relation to rated performance of the worker was Gratification Demands. For both the black female group ($r = .49$, $p < .01$) and all subjects combined ($r = .34$, $p < .01$), a significant positive relationship was observed between ratings of performance and increased value placed on Gratification Demands. These items reflect the instrumentality of work for obtaining desired non-work goals. Increased evaluation of these goals was also significantly related to the other four subscales in the Supervisory Rating Form.

For three subscales, Adjustment, Motivation, and Potential, the relationships were significant for all three subject groupings. For the remaining subscale, Stability, the relationship was significant for black females ($r = .41$, $p < .05$) and for all subjects combined ($r = .31$, $p < .05$). Increased Session II evaluation of Value Category V was associated with the combined enrollees receiving higher ratings of Adjustment ($r = .29$, $p < .05$).

There was a significant positive relationship between the rating of Adjustment and increased evaluation of Value Category III for all subjects combined ($r = .41$, $p < .01$). For black females only, increased Session II evaluation of Value Category III also correlated positively with rated employee potential ($r = .44$, $p < .05$). The only two nonsignificant relationships between evaluation changes of Value Category III and supervisory ratings of employees occurred in the white male group. While the correlations were acceptable in magnitude, a large correlation was needed to achieve statistical significance because of the small number of individuals in this group (N = 15).

Changes in evaluation of Interpersonal Relations with Co-Workers involved two significant relationships, both with the black female subgroup. For ratings of worker

Table 21

Correlations for Each Subscale of the Supervisor's Rating Form and Value Category Difference Score: Likert-Type Response Condition

Value Category	Grouping	*df*	Supervisor's Rating Scale				
			Performance	Adjustment	Motivation	Stability	Potential
I Extrinsic Benefits	WM	15	−.37	−.04	.05	−.04	−.11
	BF	27	−.14	−.19	−.14	−.26	−.04
	Σ	63	−.26*	−.06	−.15	−.16	−.06
II Intrinsic Benefits	WM	15	−.32	−.11	−.17	−.11	−.03
	BF	27	.35	.22	.12	.26	.31
	Σ	63	.03	.07	−.12	.01	.03
III Gratification Demands	WM	15	.28	.73**	.49*	.47	.49*
	BF	27	.49**	.56**	.56**	.41*	.44*
	Σ	63	.34**	.41**	.25*	.31*	.29*
IV Interpersonal Relations With Co-Workers	WM	15	−.18	−.13	.00	−.04	−.15
	BF	27	.26	.38*	.09	.23	.58**
	Σ	63	.12	.21	−.08	.08	.17
V Interpersonal Relations With Supervisor	WM	15	−.19	.04	.20	.16	−.02
	BF	27	.32	.35	.10	−.01	.38*
	Σ	63	.06	.29*	−.02	−.03	.06
VI Interpersonal Relations With Family	WM	15	−.15	.39	.32	.03	.04
	BF	27	.22	.25	.08	.10	.19
	Σ	63	.08	.20	−.09	−.02	.09
VII Interpersonal Relations With Friends	WM	15	−.03	.09	.33	−.03	.16
	BF	27	−.02	.23	−.04	−.25	.18
	Σ	63	.08	.12	.00	.01	.20
VIII Developmental Needs	WM	15	−.32	.25	.00	.04	−.02
	BF	27	.00	.28	.21	−.05	.01
	Σ	63	−.10	.17	−.10	−.06	−.04

$^*p < .05$; $^{**}p < .01$; WM, White Male; BF, Black Female; Σ, All Subjects.

Adjustment and Potential, a significant positive relationship was found with increased evaluation of the goals within this value category ($r = .38$, $p < .05$; $r = .58$, $p < .01$, respectively).

The only other value category involved in a significant relationship with a supervisory rating scale was Value Category V (Interpersonal Relations With the Supervisor).

On the whole, Value Category III seems more predictive of employee retention and potential for upward movement, as reflected by supervisory ratings. In the Likert-type response condition only, increased evaluation in Session II of this value category was

Table 22

Correlations for Each Subscale of the Supervisor's Rating Form and Value Category Difference Score: Forced-Choice Response Condition

Value Category	Grouping	*df*	Supervisor's Rating Scale				
			Performance	Adjustment	Motivation	Stability	Potential
I Extrinsic Benefits	WM	29	.26	−.24	.05	.21	.04
	BF	41	−.13	−.15	−.19	−.13	−.16
	Σ	83	.03	−.51**	−.11	.03	−.07
II Intrinsic Benefits	WM	29	.18	.29	.45*	.24	.39*
	BF	41	.29	.29	.32*	.33*	.26
	Σ	83	.20	.25*	.23*	.18	.23*
III Gratification Demands	WM	29	−.15	−.22	−.42*	−.13	−.21
	BF	41	.11	.15	−.12	.14	.08
	Σ	83	.06	.02	−.09	.09	.01
IV Interpersonal Relations With Co-Workers	WM	29	−.06	−.03	−.13	.03	.08
	BF	41	−.29	−.37*	−.30	−.38*	−.38*
	Σ	83	−.18	−.25*	−.21*	−.18	−.21
V Interpersonal Relations With Supervisor	WM	29	−.27	−.03	.14	−.30	.05
	BF	41	−.14	−.16	−.14	−.18	−.15
	Σ	83	−.19	−.09	−.03	−.19	−.09
VI Interpersonal Relations With Family	WM	29	−.04	−.16	−.08	−.23	−.05
	BF	41	.19	.10	.08	.05	−.02
	Σ	83	.07	−.05	−.04	−.11	−.05
VII Interpersonal Relations With Friends	WM	29	.04	−.22	.10	.28	.17
	BF	41	.10	.05	.15	−.05	.15
	Σ	83	.06	.00	.13	.11	.17
VIII Developmental Needs	WM	29	−.03	−.24	.02	−.11	.11
	BF	41	.25	.21	.21	.16	.07
	Σ	83	.12	.06	.13	.03	.08

$^{*}p < .05$; $^{**}p < .01$; WM, White Male; BF, Black Female; Σ, All Subjects.

positively related to good ratings by supervisors on all five subscales of the Supervisor's Rating Form. However, this interpretation should be qualified by noting a possible "halo effect." The rating given a worker on one subscale is likely to affect the ratings given on the remainder of the subscales.

Forced-Choice Response Condition. There were three significant results common to both response conditions; however, the direction of the relationship was reversed from one response condition to the other. This finding emphasized the difficulty encountered throughout this section in conceptually explaining the results observed in the forced-choice condition. In this section, the low reliability of difference scores, together with the low forced-choice value category reliabilities, makes the problem even more difficult. For these reasons, no further attempts will be made to explain the forced-choice results.

Psychological Test Scores and Supervisory Ratings

The scores given each individual on each of the psychological tests for Session II were correlated with scores on the five subscales of the Supervisor's Rating Form. The sample in the Likert-type response condition was slightly smaller, as complete scores were not available for all subjects. The total number of enrollees having all necessary scores was 97. This analysis was conducted for the Likert-type response condition only. The results of the analysis are presented in Table 23.

Table 23

Correlations for Each Subscale of the Supervisor's Rating Form and Psychological Test Score: Likert-Type Response Condition

(N = 107)

Psychological Test	Supervisor's Rating Scale				
	Performance	Adjustment	Motivation	Stability	Potential
Cynical Distrust of People	–.16	–.01	–.05	–.19	–.12
Cynical Distrust of Organizations	.17	.02	–.02	–.10	–.11
Weak Self-Regard	.17	.13	–.12	–.31**	–.24*
Achievement Motivation	–.07	.08	–.01	.01	–.15
Time Sense	.22*	.28**	.31**	.41**	.15
Protestant Ethic	.14	.26**	.16	.20	.03
Expectation of Success	–.02	.11	.11	.18	.01
Powerlessness	–.14	–.09	–.06	–.13	–.21
Meaninglessness	–.25*	–.19	.19	–.32**	–.22*
Normlessness	–.14	–.10	–.16	–.19	–.14
Value Isolation	.30	–.29	–.29	–.36	–.20
Self-Estrangement	–.15	–.12	–.14	–.23*	–.16
Work Demands	.06	.05	.07	–.07	–.14
Orientation Toward Work	–.05	–.10	–.05	–.06	.02

*$p < .05$; **$p < .01$.

Only one of the psychological tests was appreciably related to the supervisory ratings. Time Sense was found to be significantly and positively related to the subscales rating the workers' Performance ($r = .22$, $p < .05$), Adjustment ($r = .28$, $p < .01$), Motivation ($r = .31$, $p < .01$), and Stability ($r = .41$, $p < .01$).

Four other psychological tests—Protestant Ethic, Weak Self-Regard, Meaninglessness, and Self-Estrangement—were related to one or more of the supervisory rating subscales. The Protestant Ethic test was positively related to the subscale assessing worker Adjustment ($r = .26$, $p < .01$). Meaninglessness was negatively related to rated Performance of the worker ($r = -.25$, $p < .05$). Meaninglessness, Self-Estrangement, and Weak Self-Regard were all significantly associated with rated Statility of the worker (respectively, $r = -.32$, $p < .01$; $r = -.23$, $p < .05$; $r = -.31$, $p < .01$).

As mentioned earlier, one interpretation of the observed pattern of relationships between supervisory ratings and difference scores for Value Category III involved a rating halo. To further assess this effect, the subscales of the Supervisor's Rating Form were included in a correlation matrix. The results of this analysis are presented in Table 24. As shown, ratings given on one subscale were highly related to ratings given on any other subscale.

Table 24

Intercorrelations Among Subscales of the Supervisor's Rating Form: Likert-Type Response Condition

(N = 97)

Supervisor's Rating Form Subscale	(1)	(2)	(3)	(4)	(5)
(1) Performance		.49**	.58**	.67**	.76**
(2) Adjustment			.69**	.57**	.49**
(3) Motivation				.60**	.57**
(4) Stability					.73**
(5) Potential					

$^{**}p < .01$.

Job Description Index Scores and Supervisory Ratings

Correlations between each of the five job areas tapped by the JDI and the five supervisory subscales were computed for the Likert-type response condition data obtained from Session II. The results of this analysis are shown in Table 25.

Table 25

Correlations for Each Subscale of the Supervisor's Rating Form and Job Description Index Area Score: Likert-Type Response Condition

(N = 107)

JDI Area	Supervisor's Rating Scale				
	Performance	Adjustment	Motivation	Stability	Potential
Satisfaction With Work	.09	.19	.21*	.26**	.19
Satisfaction With Supervision	.15	.24*	.23*	.25*	.14
Satisfaction With Pay	.07	−.05	−.01	.13	−.03
Satisfaction With Promotions	.12	.14	.02	.07	−.02
Satisfaction With Co-Workers	−.02	.13	.02	.06	−.01

$^{*}p < .05$; $^{**}p < .01$.

The JDI area which significantly related to the most supervisory subscales was that assessing satisfaction with supervision. This JDI area was positively related to ratings of the workers' Adjustment ($r = .24$, $p < .05$), Motivation ($r = .23$, $p < .05$), and Stability ($r = .25$, $p < .05$). Only one other JDI area was significantly related to supervisory ratings, that tapping the individual's satisfaction with the work. Scores on this JDI area were significantly related to the supervisory subscales measuring Motivation ($r = .21$, $p < .05$) and Stability ($r = .26$, $p < .01$).

While several significant correlations were reported in the preceding three sections, the overall picture is one reflecting a relatively low relationship between supervisory ratings of a subordinate and the subordinate's responses in a number of areas.

FACTOR ANALYSIS

Findings reported in this section are based on the subjects participating in both data collection sessions. The data input to the factor analysis derived from Session II. There were 107 subjects in the Likert-type condition and 104 subjects in the forced-choice condition.

The pattern of findings obtained to this point in the analysis suggested that the logically derived goal categories probably should be subjected to empirical validation. Consequently, a principal components factor analysis, with varimax rotation, was performed on the 32 goals within each response condition. The findings are presented in Table 26.

Table 26

Factor Loadings[a] of Each Goal for Both Likert-Type and Forced-Choice Data

Goal	Likert-Type					Forced-Choice				
	Factor					Factor				
	I	II	III	IV	V	I	II	III	IV	V
Percent of Variance	.27	.08	.07	.06	.05	.13	.11	.08	.07	.06
Goal										
1. Good pay			.41		.49		.72			
2. Good working conditions, like air conditioning										
3. A good vacation each year			.70	.45		.61				
4. A good retirement plan			.67					.53		
5. Being able to work close to home	.41			.41			.50			
6. A good hospitalization plan	.53		.53			.70				
7. A plan to pay doctor's bills			.71			.45				.42
8. Being able to keep the job as long as you want	.79									
9. Being able to take pride in what you do	.52				.45	.73				
10. Being able to do the type work you always wanted to do					.48					
11. Knowing there is a good chance of being promoted			[illegible]					.75		
12. Feeling proud of your job					.75	.46	.41			
13. A lot of time off without losing pay					−.48				.43	
14. Being able to buy a lot of new things				.71		.48				
15. Being able to buy things I have always wanted				.74				.60		
16. Being able to buy things I need	.45			.54				.58		
17. Being able to work with people who think my work is good	.48	.47					.63			

(Continued)

Table 26 *(Continued)*

Factor Loadings[a] of Each Goal for Both Likert-Type and Forced-Choice Data

Goal	Likert-Type					Forced-Choice				
	Factor					Factor				
	I	II	III	IV	V	I	II	III	IV	V
18. Being able to work with people who like me		.63					.54			
19. Being able to work with people who are friendly		.49	.54				.45			
20. Being able to talk and have fun with the other people working there		.64								
21. Being able to work with people who think as much of me as my friends do		.77								.63
22. A supervisor who is friendly		.49					.52			
23. A supervisor who treats everyone fairly	.53							.53		
24. A supervisor who tells you when you have done a good job on something	.69									
25. A supervisor who helps when you need help									.91	
26. A supervisor who is willing to help you with your off-the-job problems		.59					.63			
27. Knowing your family is proud of the work you do	.43					−.51				
28. Knowing your friends respect you for the work you do		.46							.91	
29. Having a job that is interesting to your friends		.57		.49		.42	.41		.49	
30. Being something you can talk to your friends about after work		.63								.56
31. Being able to learn new things that will help you get a better job later	.66							.41		
32. Being able to learn to do something that is really hard	.64									−.76

[a].40 or greater.

Five factors were identified for each response condition. In the Likert-type condition, these factors accounted for 53% of the variance within the matrix. In the forced-choice condition, they accounted for 46% of the variance. Table 26 shows loadings of the various goals on each of the five factors, together with the percentage of variance accounted for by each factor. Only loadings greater than .40 are shown.

Likert-Type Response Condition

Examination of the items loading on the five factors within the Likert response condition indicated a reasonably consistent picture.

The items loading on Factor I—Security through Job Accomplishment—are listed.

Item No.	Item Content	Factor Loading
8	Being able to keep the job as long as you want	.79
24	A supervisor who tells you when you have done a good job on something	.69
31	Being able to learn new things that will help you get a better job later	.66
32	Being able to learn to do something that is really hard	.64
23	A supervisor who treats everyone fairly	.53
6	A good hospitalization plan	.53
9	Being able to take pride in what you do	.52

The large percentage of variance accounted for by this factor (27%) might be taken to suggest a generalized test response interpretation; however, the remarkable interpretability of the items loading higher than .50 indicates substantive meaning. The item with the highest loading suggests a security connotation for this factor. The second, third, and fourth items suggest rewards through the work itself, an achievement or motivation orientation similar to the context of Herzberg's motivator factor. This interpretation seems to be supported by the fifth item, if one assumes that fairness is defined in terms of personal worth through job productivity. The sixth item does not seem consistent with the previous five. However, the seventh certainly is.

Six of these seven items suggest that the first factor should be interpreted as indicating a desire for job security through achievement or accomplishment on the job. It is suggestive of a personal orientation based on the belief that an individual who performs well on his job and makes himself valuable to his employing agency will thereby have job security. The security envisioned by the worker involved several work dimensions, as indicated by the items loading on this factor. Items five and seven are descriptive of a job that would be respected by others. Additionally, it would not be likely that anyone doing such work would be laid off or terminated. Taken together, these items suggest a situation in which the lower-level needs of Maslow's hierarchy are satisfied. This factor, consequently, has been named Security Through Job Accomplishment.

The items loading on Factor II—Social Interaction Orientation—are:

Item No.	Item Content	Factor Loading
21	Being able to work with people who think as much of me as my friends do	.77
20	Being able to talk and have fun with the other people working there	.64
30	Being something you can talk to your friends about after work	.63
18	Being able to work with people who like me	.63
26	A supervisor who is willing to help you with your off-the-job problems	.59
29	Having a job that is interesting to your friends	.57

The variance (8%) accounted for by this factor is considerably lower than was the case for Factor I. The items nonetheless appear consistent, and reflect a need for social interaction both within the context of the job and off the job. This factor consequently has been labeled Social Interaction Orientation.

The items loading on Factor III—Materialistic Orientation—are listed:

Item No.	Item Content	Factor Loading
7	A plan to pay doctors' bills	.71
3	A good vacation each year	.70
4	A good retirement plan	.67
19	Being able to work with people who are friendly	.54
6	A good hospitalization plan	.53
11	Knowing there is a good chance of being promoted	.52

The variance (7%) accounted for by the factor was similar to Factor II. The factor seems readily interpretable: Four of the first five items reflect concern with fringe benefits. This suggests a materialistic orientation toward the job, with a higher valuation of the job as it is worth more in a materialistic sense. (This interpretation is supported by the fact that good pay also loaded on this factor, though its loading of .41 was too low for it to be used as a primary basis for factor interpretation.) The remarkable consistency of fringe benefit loading, together with the absence of loadings reflecting content of the work itself suggests that this factor reflects materialistic, as opposed to intrinsic, needs. It consequently has been labeled Materialistic Orientation.

The items loading on Factor IV—Economic Instrumentality—are listed:

Item No.	Item Content	Factor Loading
15	Being able to buy things I have always wanted	.74
14	Being able to buy a lot of new things	.71
16	Being able to buy things I need	.54

This factor accounted for 6% of the variance. The three items loading higher than .5 on this factor are remarkably consistent in content; the factor has been labeled Economic Instrumentality.

The items loading on Factor V—Esteem Satisfaction Through Work—are:

Item No.	Item Content	Factor Loading
12	Feeling proud of your job	.75
1	Good pay	.49
10	Being able to do the type of work you always wanted to do	.48
9	Being able to take pride in what you do	.45
13	A lot of time off without losing pay	−.48

Items with loadings lower than .50 were listed for Factor V in order to facilitate interpretation. This factor accounted for 5% of the variance in the matrix. With the exception of Item 1, Good Pay, the items loading positively reflect a self-actualization or esteem theme, with surprising clarity. The item loading negatively, as well as Good Pay, probably suggests—as noted by Jacobs (1970)—that for workers in the lower end of the socioeconomic scale, pay may have much more instrumentality for esteem satisfaction than is true for workers at higher socioeconomic status levels. Given this, Factor V is strongly suggestive of Esteem Satisfaction Through Work, and, consequently, this label has been applied to this factor. This factor reflects an underlying motivation by the worker to satisfy the highest level of need in Maslow's hierarchy of needs.

Factors I and V are interpreted as motivational in nature, with the end-state being different for each. These two factors relate most to the intrinsic aspects of the job, while Factors II-IV are most heavily weighted by extrinsic facets of the job.

Forced-Choice Response Condition

Table 26 also shows item loadings on the five factors extracted in the forced-choice response condition. As with the factor loadings in the Likert-type condition, the items loading on the forced-choice factors were inspected to develop a basis for factor interpretation. This led to very unsatisfying results. There were three problems. First, the items with high loadings did not form consistent pictures, as was the case with the Likert-type factors. Second, the number of goals loading on each factor was, on the average, low. Third, the reliabilities (see Table 3) of the goal statements in this condition were generally lower. All these observations indicate that there probably was insufficient reliable variance within the forced-choice correlation matrix to provide for the reliable identification of factors. This suggests that an effort to interpret the forced-choice response factors might be misleading. For this reason, no effort at interpretation has been made.

Analysis of Factor Scores

After rotated factors were identified, factor scores were computed for each of the individuals within the total sample, for each of the factors, and for each of the response conditions. (This analysis was conducted for the forced-choice response condition as a cross-check on the low reliability interpretation of the item loadings noted in that set of rotated factors.) These factor scores were then correlated with the psychological tests, and with the JDI area scores. The results are shown in Table 27. The relationships shown in this table serve as a vehicle for content validation of the factors and the interpretations given them earlier.

Factor I was labeled Security Through Job Accomplishment. This label suggests a belief that an individual becomes of value to his employer through the excellence of his job performance, thereby attaining job security. The pattern of correlations of the psychological tests with Factor I tends to support this interpretation. While the correlations are generally low, significant positive relationships were found with tests thought to measure Protestant Ethic values and an Expectation of Success Through Accomplishment. Significant negative correlations were found between Factor I, on the one hand, and Powerlessness, Normlessness, and Cynical Distrust of People, on the other. While it should be reemphasized that these correlations are generally low, the pattern of relationships is nonetheless quite supportive of the interpretation given Factor I.

The extent of support for the interpretation given Factor II is, however, not as great. Factor II has been interpreted as a social orientation. Three psychological tests correlated significantly with Factor II. These were Achievement Motivation, Normlessness, and Value Isolation (negative). Examination of the item contents of these tests suggests how this pattern of correlations could have occurred. The measure of Achievement Motivation is phrased in terms of respect for someone who gets ahead. It is reasonable

Table 27

Correlations of Factor Scores With Psychological Tests and Job Description Index Areas

Item	Likert-Type					Forced-Choice				
	Factor					Factor				
	I	II	III	IV	V	I	II	III	IV	V
Psychological Test										
Cynical Distrust of People	−.25*	−.12	.08	.10	.08	.14	−.01	.16	−.05	−.05
Cynical Distrust of Organizations	−.04	−.09	.28**	.19	.10	.02	−.14	.03	.00	−.07
Weak Self-Regard	−.14	.14	−.01	.11	−.29**	.19	.14	.25*	−.09	.10
Achievement Motivation	.11	.28**	.13	.15	.06	−.12	−.06	−.22*	.05	−.21*
Time Sense	.08	.08	−.02	−.18	.26**	−.13	−.21*	−.16	.16	−.08
Protestant Ethic	.21*	.13	−.10	−.13	.19	−.08	.02	−.10	−.06	−.05
Expectation of Success	.25*	.03	.05	.12	.12	−.07	.01	−.01	.09	−.02
Powerlessness	−.20*	−.01	.14	.02	−.10	.11	.13	.01	−.19	−.01
Meaninglessness	−.15	.03	.05	.20*	−.27**	.17	.13	.10	−.20*	.16
Normlessness	−.22*	.22*	−.04	.27**	−.20*	.11	.22*	.06	−.02	.20*
Value Isolation	−.12	−.20*	−.12	.20*	−.22*	.34**	.03	.27**	−.10	.15
Self-estrangement	−.16	−.16	−.08	−.01	−.19	.22*	.01	.16	−.09	.10
Work Demands	.04	.17	.18	.04	.07	.07	.12	−.17	−.10	.19
Orientation Toward Work	−.09	−.12	.19	.24*	−.10	.15	.02	.15	.05	−.09
JDI Areas										
Satisfaction With Work	.10	.16	.09	−.16	.27**	−.11	.19	−.01	.02	−.05
Satisfaction With Supervision	.04	−.02	.06	.03	.10	−.21*	−.03	−.04	−.03	−.08
Satisfaction With Pay	−.10	.20*	−.17	−.08	.07	.01	.18	.03	.07	−.05
Satisfaction With Promotions	.11	.25*	−.20*	.02	.20*	−.01	.19	−.03	−.04	−.12
Satisfaction With Co-Workers	.18	.17	−.01	−.11	.15	−.06	.00	−.13	.06	−.19

*$p < .05$; **$p < .01$.

that this could be positively correlated with social orientation. The correlation with Value Isolation is also reasonable. It is a measure of alienation from the people the respondent works with; someone with a social orientation should not feel alienation. Conflict does occur in that Normlessness (a feeling that it is not necessary to stick by the rules) correlates positively with this factor. This is the only case in which its correlation is not the same sign as Value Isolation. While a case could be made for this, it is purely an ad hoc explanation.

One test correlated significantly with Factor III. The items in this test, Cynical Distrust of Organizations, reflect a basic apprehension of exploitation by "big business."

It seems quite reasonable that a materialistic orientation would be coupled with this apprehension, and with the dissatisfaction with promotions found in the JDI.

Several tests correlated with Factor IV. Three of these reflect the anomie thought to characterize the disadvantaged. The fourth reflects a desire for structured work as opposed to change. These also are thought to be reasonable relationships, in that Factor IV itself, seeing the job in terms of its economic instrumentality, probably also is suggestive of disadvantagement.

Several significant relationships were also found with Factor V. Given the interpretation of that factor as self-esteem through work, the pattern of relationships with the psychological tests is quite consistent. First, Weak Self-Regard is negatively related to Factor V at the .01 level. Time Sense is positively related at the same level. Meaninglessness, Normlessness, and Value Isolation are all negatively related, the first at the .01 level. Finally, the JDI Satisfaction With Work scale was positively correlated at the .01 level with this factor.

The strength of association between scores on each of the five identified factors and the five subscales of the Supervisor's Rating Form was assessed by means of Pearson product moment correlations. There were no significant relationships observed between these two variables.

Examination of Table 27 also supports the earlier decision not to attempt interpretation of the forced-choice response condition factors. Of the 95 correlations for each response condition shown in this Table, 23 were significant for the Likert-type factors. Only 11 were significant for the forced-choice response condition. This is a reasonable outcome of the lower observed reliabilities in the first forced-choice condition, and confirms the conclusion that the forced-choice factors probably are not sufficiently reliable to be interpreted.

Chapter 4

DISCUSSION

FINDINGS AND IMPLICATIONS

A necessarily initial objective of this project, the development of methodology for the measurement of work goals and expectations of PSC enrollees, was substantially achieved. The differences cited between response conditions with respect to observed significant relationships showed that the response formats either (a) were not tapping the same dimensions, or (b) were not equally powerful in discriminating between subjects. The results from one response condition were not comparable to those from the other response condition. The fact that the first section of the questionnaire (goals rating) included the same items for both response formats indicated that the forced-choice methodology was probably responsible for the noncomparable results. As previously noted, the forced-choice condition involved an incomplete paired-comparison of all the goals, because of the length of the questionnaire that would have been necessary for a complete paired-comparison.

This lack of comparability of results between response conditions, together with the low reliability coefficients associated with the questionnaire in the forced-choice format, is the basis for concluding that the forced-choice methodology, coupled with an incomplete paired-comparison, is not as powerful as the Likert-type response condition. The reliability coefficients associated with most sections of the Likert-type response format were themselves marginal in size. It would seem, then, that the Likert-type questionnaire is the preferred form for eliciting responses to the content items used in this project.

An additional basis for such an inference concerns the comparisons between response conditions of tests that were administered in *identical* forms (the JDI and the Orientation Toward Work test). While the differences between reliability coefficients for each response condition varied in magnitude, one was very large (.33); others were in the .09 to .10 range. Taken together, these differences suggest a differential impact of the questionnaire on the enrollees as a function of the type of response condition. Therefore, only results obtained through use of the Likert-type format will be considered in this section.

Other objectives of this project were (a) to measure the world-of-work values of PSC entrants, and changes in them as a function of experience with the work environment, and (b) to establish the relation between these values (and changes in them) and attainment of desired objectives of the PSC Program.

In exploring the relation between changes in the entrants' world-of-work values and attainment of PSC Program objectives, data reflecting the current employment status of participating entry-level enrollees were collected. Continued participation in, or successful completion of, the PSC Program was to be related to the measured world-of-work values of each enrollee. Originally, a significant attrition rate had been anticipated. However, when the termination rate of entry-level enrollees from Session I to Session II was determined, it was found to be relatively low. For the Washington, D.C. area sample, the retention rate was 80%, which compares favorably with retention rates reported for several similar programs conducted by private industry. Ford Motor Company reported retention rates of 78 and 79% for two groups of ex-hard-core unemployed (Johnson, 1969).

Plans for determining the retention rate for the PSC Program called for the use of data recorded on SF 163, a standard form used to collect biographical information on PSC enrollees. These data would be used to identify those enrollees successfully completing the program, and the reasons for not completing the program could be specified. Current status information was obtained for only 60 of the subjects; data were not available for 130 of the enrollees participating in both sessions. Fifty-one of the 60 had successfully completed the program, the other nine having dropped out prior to completion. Because of the lack of data, further analyses could not be performed.

Results of the first data collection session had indicated that a relatively low rate of attrition was likely. The world-of-work values and the perceptions of the entry-level enrollees were generally the same as those characterizing both upgrade and equivalent personnel. As the upgrade personnel had a history of steady employment and were aspiring to upward mobility, this lack of difference had several implications for inferences and expectations of the entry-level group. Initially, it had been expected that those entrants who remained in the program would experience organizational socialization over time, to the extent that, at the end of some time frame (possibly one year), their values and perceptions would be similar to those characterizing employees having greater seniority. Since there were few differences between the upgrade and entry-level groups, the organizational socialization that could occur over time was minimal.

While subjects in both groups discriminated among the values and goals shown in the questionnaire, the most highly valued outcomes of work for both groups were perceived as Intrinsic Benefits and Developmental Needs. The items categorized into the Intrinsic Benefits area reflected "the work itself," in the Herzberg sense. Goals categorized as Developmental Needs, while similar, reflected achievement as opposed to the content of work. The least valued outcomes of work, for both groups, were Gratification Demands and Interpersonal Relations With Friends.

Implications of these and other similarities were as follows:

(1) Since values rated highest reflected interest in the work and in further individual development, the enrollees would be motivated to perform well.

(2) Based on their interest in their jobs and the value placed on work, the attrition rate would be low.

(3) Because of both the degree of socialization with respect to the "middle-class value system" with its emphasis on achievement, and the level of education and ability of most enrollees, underemployment was thought likely. Dissatisfaction with a job because it is perceived as less than desirable and lower than the job that could be performed well was considered probable in view of the entry-level jobs made available to the enrollees.

In summarizing the Session I results, it was found that the entry-level enrollees did not demonstrate many of the characteristics frequently associated with the "hard-core unemployed" group.

Session II, conducted six months later, found some changes over time in the values and perceptions of the entry-level enrollees. A Spearman *rho* was computed between the rankings given the eight value categories. The correlation was .90, indicating a very high degree of consistency over time in the values of these enrollees. One of the factors underlying this consistency may be the social desirability of such goals to participants within this context.

Of the few changes observed in the enrollees over time, most could be interpreted as reflecting a realistic appraisal of the job and associated working conditions. This was more evident for the females than for the males, as the females appeared to have entered the program holding higher aspirations and expectations than did the males.

Both males and females expressed lower levels of trust in others and their motives in Session II than Session I. Males also reported more concern over inability to control the outcome of their work; this may reflect the effect of working in a very large, primarily rule-bound organization. The males also rated the goal of Being Able to Take Pride in What You Do as less important than in Session I. To what extent this shift was related to the jobs held and/or to decreased salience of this need through partial satisfaction is undetermined.

The enrollees also placed lower values on several other goals: (a) Able to Work With People Who Think as Much of Me as My Friends Do, (b) Knowing Your Friends Respect You for the Work You Do, and (c) Able to Work With People Who Like Me. Decreased evaluation of these goals could be due to one or more of several reasons. Two possible reasons that have been considered are as follows:

(1) Decreased anxiety. The higher initial rating reflected the anxiety of the individual concerning his acceptance by co-workers. He anticipated difficulty in moving into the established work group, and was anxious concerning the success of his efforts. The lower Session II rating indicates that success was achieved and less anxiety is now experienced.

(2) Reappraisal of job requirements. The earlier ratings reflected those job aspects that were deemed necessary by persons with little job experience. Over time, the requirements for an acceptable job have changed. The individual has reappraised what is seen as necessary for a "liked" job, and this is indicated by the changed scores.

It was previously mentioned that underemployment was likely, considering the entry-level jobs and the level of the entrants. The lesser value placed by males on Pride in Work and Promotions, as well as the females' expressed desire for a less structured, routinized job seem relevant to such a consideration.

In general, the degree of value congruence between entry-level enrollees and those in the upgrade component of the PSC Program was very high. Part of the planned purpose of the PSC Program was that the entry-level enrollees be marginal or hard-core unemployed. This point will be dealt with later; for now, the group will be considered marginal workers.

The implications of this result, for the type of training program that should be used, are relatively straightforward. If differences in world-of-work values and commitment to work do exist between the marginal worker and employees with successful job histories, then a training program emphasizing a psychological approach (e.g., one of attitude change) might be more productive. However, if various barriers and situations (e.g., luck, according to Ferman [1970] would be one such factor) contribute to maintaining this marginal population, then a program focused more on social and institutional changes might be more effective.

As Gurin (1970) pointed out, an unfortunate tendency in the past has been to conceive of psychological and situational approaches as opposites. In his view, a training program for marginal or hard-core unemployed, focused on motivational and attitudinal problems to the exclusion of reality factors, is as much in error as those attempting to deal with the problems of poverty by assuming that changes in the opportunity structure and other institutional values will automatically eliminate any motivational problems.

The necessity for attention to the motivational and attitudinal problems of trainees is reflected in the conclusions reported by Kirchner and Lucas (1972). These writers felt that "An obvious key to the hard-core problem, then, is motivation or lack of it." (p. 37). Findings of their report indicated that more of the older, less intelligent minority individuals stayed with the training program than those who were younger and better educated. Johnson (1969) also pointed out that men and women migrants to the North, of age 45 or over, are less likely than young blacks to turn down entry-level jobs that may appear to be dead-end. Johnson felt that, for the 45-and-over age group, the end objective is steady work at a fair salary.

Inferentially, conclusions and findings such as are presented here would indicate that many of the hard-core unemployed, *especially* the younger individuals, are aware of and have internalized many of the world-of-work values of the larger society. The aspirations of the larger society often have been internalized as well, frequently leading to unachievable ambition on the part of these younger individuals. Such individuals often look down on those jobs for which they are qualified, ignoring their lack of training for more marketable skills.

Inferences of this type would also pertain to the results of this project. The females had less prior work experience than the males and, generally, had relatively higher expectations regarding the entry-level jobs. As reflected in the JDI results, as well as those previously cited, there was more of a drop in job satisfaction between Session I and Session II for the females than for the males. This result could reflect disappointment of the aspirations and goals characteristic of the larger society, which had been internalized by the females.

In seeking to relate any changes in values over time to attainment of desired objectives of the PSC Program, retention of a job or successful completion of the program are criteria that would have been used had sufficient information on the enrollees been available. In the absence of such data, supervisors' ratings on five different dimensions—performance, adjustment, motivation, stability, and potential—were used as the criterion variables for the predictors of value changes over time, and the entry-level PSC enrollees were broken out in subgroupings on the basis of sex and ethnic group. Only two of the subgroupings (white males and black females) were of sufficient size for the resulting correlations to be of acceptable reliability.

The best single predictor of supervisory ratings was the value category of Gratification Demands. Increased ratings of this value category for Session II were positively associated with supervisory ratings on all five dimensions. Interestingly, three of the five goals within this value category are the same three goals that comprise the Economic Instrumentality factor, one of the factors identified through a factor analysis performed on all 32 goals.

One possible basis for the pervasive association between ratings of this value category and the supervisory ratings is as follows. The goals common to this value category and the identified factor pertain to buying, the purchasing power afforded by the job. To the extent that the enrollee sees the job as providing the means whereby desired ends can be attained, there should be increased motivation to retain the job. Upward mobility would be more salient for such an individual, as higher-level jobs provide increased instrumentality for obtaining goals. The worker, motivated to retain the present job and move upward, must ensure that favorable evaluations are provided by the supervisor. The more the employee convinces the supervisor of his job motivation and interest in good performance, the higher should be the ratings given the employee on *all* scales.

The consistent significant associations between ratings of Value Category III and the supervisory scales held for black females and all entry-level enrollees combined. The relationship between two of the supervisory scales (Performance and Stability) were not significant for the white male group, probably because of the small group size (N = 15). Another possible basis for the pattern of relationships is that those individuals most interested in holding their jobs are simply more compliant, they try to please their supervisors. Still a third possibility is an artifact of measurement—the "halo effect" where multiple ratings of an object or person by a judge tend to be related by a "carry-over" of evaluation from one to another rating category.

For the black female group, increased predictive efficiency of supervisory ratings would result from inclusion of the ratings of the value categories of Interpersonal

Relations With Co-Workers and Interpersonal Relations With Supervisors. Increased evaluation of these two categories was associated with two of the supervisory rating scales, Adjustment and Potential.

A significant negative relationship between increased evaluation of Extrinsic Benefits and rated performance of the worker was observed for all subjects combined. Possibly, concern for these goals could relate to some non-work related activity, such as meetings. If so, these work absences could result in the supervisor rating a subordinate lower. While the relationships between increased evaluation of this category and the remaining supervisory rating scales are not significant, they are all negative. This pattern might again reflect the "halo effect" discussed previously, rather than valid findings.

A conclusion concerning the supervisory ratings and the subordinates' ratings of the value categories is that the use of two categories—(a) Extrinsic Benefits and (b) Gratification Demands—would be most effective for predicting supervisory ratings. For black females, increased predictive efficiency for ratings of Adjustment and Potential would be gained by including the value categories of (a) Interpersonal Relations With the Supervisor and (b) Interpersonal Relations With Co-Workers.

In relating scores on the psychological tests to the five supervisory subscales, one pattern was noted that involved rated stability of the worker. It correlated with scores on several psychological tests in the following manner: negatively with Weak Self-Regard, positively with Time Sense, negatively with Meaninglessness, and negatively with Self-Estrangement.

When the ratings given by supervisors to PSC enrollees on the five scales were compared with the ratings given the average non-PSC subordinate, there were no significant differences between the ratings given each type of subordinate.

The behavior of the supervisor has been found to have appreciable effect upon the worker and his behavior (e.g., Ronan, 1970a). The Job Description Index area that related to the majority of the supervisory subscales was the Satisfaction With Supervision area. Scores on this job area were positively associated with ratings on the Supervisor's Rating Form subscales of Adjustment, Motivation, and Stability of the worker. The PSC enrollees rated the leadership behavior of their supervisor on the dimensions of Consideration and Initiation of Structure. Results indicated that blacks rated their supervisors lower in exhibiting Consideration behaviors than did whites. Black female supervisors were rated lowest on engaging in Initiation of Structure activities.

Johnson (1969) and Van Brunt (1972) report comments originating in the private sector concerning the impact of supervisory behavior and attitudes on the success of programs focused on the hard-core unemployed. The new trainee from the "hard-core" category is generally less than fully trusting of the motives and intentions of the employer. The trainee does a certain amount of "testing" in which he attempts to determine the employer's sincerity and interest. As the employer's representative, the first-line supervisor is in an especially visible and sensitive position. To the extent that he is able to understand the motivation underlying the "testing behavior" exhibited by the trainee, can avoid being adversely affected by different life-styles, and is concerned with communicating with the trainee, the likelihood that the trainee will respond in a positive fashion increases. Development of trust in the intentions of the employer and the supervisor is an important factor in the evolution of the trainee into a productive member of the labor force.

The decreased trust in others and their motives, on the part of both males and females in Session II, may reflect a need for additional first-line supervisory training.

One critical facet of the supervisor-subordinate relationship is communication/perception. Since a significant percentage of those individuals classified as "hard-core unemployed" are black, differences in black-white perceptions, attitudes, and life styles are of paramount importance in developing effective supervisory styles. The ethnic group effect upon supervisory ratings of Consideration and Initiation of Structure reflects this need.

Using the Job Description Index (Smith, Kendall, and Hulin, 1969) as a measure of job satisfaction, Milutinovich (1971) compared the job satisfaction of both Negro and white blue- and white-collar employees under participative and authoritative supervisory styles. The results indicated that Negro employees, both blue- and white-collar, have greater job satisfaction than do white blue-collar workers, but less than white white-collar employees. Employees expressed greater job satisfaction under participative than under authoritative supervisory style. Generally, ethnic group membership was found to influence job satisfaction only minimally.

With respect to job satisfaction, King and Bass (1970) stated that the average black in industry feels a greater concern than the average white regarding perceived injustices. Since these included such things as rejection for jobs and opportunities for promotion, failure of the organization to satisfy these needs would be expected to result in lower job satisfaction.

Slocum and Strawser (1972), who mailed Porter's (1961) need satisfaction questionnaire to black and other Certified Public Accountants, reported that black CPAs generally express a greater need deficiency than do other CPAs. All respondents indicated that the largest deficiencies occurred in the self-actualization and compensation need categories.

Studies such as the preceding, which are specifically focused on the variable of race, using a particular methodology or questionnaire, have not been sufficiently numerous to answer many relevant research questions—especially with respect to the blue-collar, unskilled, and semiskilled positions. Triandis and Malpass (1971) concluded from a series of studies by Triandis, Feldman, and Harvey (1970, 1971a, 1971b) that ". . . there are genuine racial differences in the perception of the social environment."

One of the difficulties encountered in such comparative studies was illustrated in a report by Bloom and Barry (1967). From the results of a questionnaire administered to samples of blacks (in janitorial or unskilled and semiskilled jobs) and whites (primarily in maintenance positions at all skill levels), it was concluded that the blacks probably did not have the same perception of the questionnaire items as did the whites. While such a conclusion is in agreement with that reached by Triandis and Malpass (1971), it points up the necessity for additional basic research concerning ethnic group similarities and differences.

To what extent studies conducted in an academic environment can help satisfy this need is questionable. One such study, conducted by Richards and Jaffee (1972), was focused on the question of interracial differences that could occur when blacks were supervising whites. One finding reported by these researchers was that the race (black or white) affected the behavior of white subordinates. While the researchers felt that a possible difference between black and white supervisors was that black supervisors emitted ". . . fewer behaviors that related to being an effective supervisor," findings such as those of Lewit and Abner (1971) should be considered. These authors found significant black and white semantic differences with respect to several significant concepts. These differences were with respect to both an encoding task (ratings of concepts on semantic differential scales) and the decoding task (identifying the concept which had been encoded by another subject).

Findings and conclusions such as those by Triandis, *et al.* (1970, 1971a,b) and Lewit and Abner (1971) must be considered in the development of any study aimed at identifying black-white similarities and differences.

Other than the previously mentioned Slocum and Strawser (1972) study, none of the numerous reports concerning job satisfaction and motivation to work have included race as a variable.

Implications of these findings are most salient for supervisory training needs. The developers of any comprehensive training course would need to draw heavily from results such as those presented above. Additionally, courses for enrollees could profitably include one or more sections dealing with the same topics. The findings cited here constitute the primary basis for several of the recommendations that are presented at the end of this chapter.

The two most reasonable alternatives for explaining the pattern of results with respect to characteristics of the personnel are that (a) they are not the "hard-core unemployed," because the hard-core were systematically excluded from the program in favor of better qualified applicants, or (b) they are the "hard-core unemployed," but the characteristics and values frequently ascribed to this group need to be revised because they are actually congruent with those of other workers.

From the results of the literature review, alternative (b) would seem to be an acceptable explanation; several studies found a high degree of value congruence between hard-core unemployed and various other groupings of workers. However, the behavioral indices (supervisors' ratings and attrition) call this explanation into question. A point generally agreed upon by workers in the area is that attendance/punctuality is a problem common to the ex-hard-core unemployed. Inferentially, the high supervisory ratings assigned PSC entry-level enrollees do not reflect attendance problems. While the attrition rate is comparable to similar programs in the private sector, there is a critical difference: Most programs in the private sector seem to have emphasized to a greater extent some direct means of displaying their interest and encouragement to the ex-hard-core (i.e., buddy systems, coaching, counseling, going to their homes and getting them when they were absent).

Several program developers in the private sector have reported that, in their experience, the hard-core frequently need much longer to complete a training course than do non-hard-core. Information on the extent to which such modifications were required for training courses given the PSC enrollees was not within the province of this project, but would be relevant to future decisions affecting the PSC Program.

The points cited here argue for explanation (a), that the hard-core unemployed were excluded from the program. This has been a problem with many similar programs in both public and private sectors. The employer, or hiring agency, usually cannot afford to lose sight of existing organizational goals (i.e., production schedules, quotas). A common assumption is that the hiring of any significant percentage of hard-core unemployed will impact negatively on attaining these goals. As a result, the employer, or hiring agency, often attempts to select those individuals whom they feel will be the more productive workers.

CONCLUSIONS

(1) The world-of-work values and perceptions of the PSC enrollees were, for the most part, congruent with those of the "middle-class value system."

(2) The presence of only a few changes in the world-of-work values and perceptions of the enrollees as a function of job experience, and the high level of supervisory ratings, indicate the appropriateness of these values for the work environment.

(3) The "typical" PSC enrollee probably is underemployed in the entry jobs, and might continue to be after one promotion.

RECOMMENDATIONS

The following recommendations are based upon the findings of this project and the relevant conclusions reached in the studies cited in the Introduction and Discussion portions of this report. These recommendations are focused on any future changes that might be made in the operation of the PSC Program.

(1) An "Outreach" feature should be added to the PSC Program, for the purpose of recruiting the extremely disadvantaged, both through direct contacts in the disadvantaged community and through referrals by appropriate agencies.

Inclusion of this feature would, of necessity, result in some modifications to the existing structure of the PSC Program. One such change would involve a shift in the allocation of resources so that more personnel would be available to engage in "Outreach" activities. It might be necessary to choose these personnel on the basis of criteria presently used in selecting personnel. Sequencing of the PSC Program activities would need to be considered because persons entering through outreach activities might exhibit values and attitudes different from the current enrollees. Restructuring and/or redesign of some features of the PSC Program might be necessary.

(2) Greater emphasis should be given the entry criterion that the applicant could not have obtained the job without PSC Program intervention.

(3) Greater emphasis should be placed upon providing information to, and obtaining the cooperation of, supervisors of PSC entrants.

(4) As new training courses are developed for supervisors of PSC entrants, special attention should be paid to topics that are especially relevant for enrollees (e.g., communication, behavioral expectations, and establishment of a supportive environment).

(5) Social skills courses developed for PSC entrants should *not* be predicated on the assumption that the entrant's values are substantially different from those of the "middle class," but should emphasize job-related behaviors.

(6) Training courses for PSC entrants should provide for individual reinforcement *contingent* upon progress. These courses should be periodically reviewed for appropriateness of content and delivery, in light of student characteristics.

(7) Courses for PSC entrants should be substantially tied to job development training. The entrant should know the job for which he is slated. Training methodology should emphasize demonstration and repetition.

(8) The PSC Program should give increased emphasis to the provision of necessary supportive services and counseling, to include extensive *vocational* counseling. Ideally, supportive services, presently provided in varying degrees, would include day care services, dental services, legal aid, medical services, financial services (including personal budgeting), and transportation.

(9) A questionnaire should be developed to increase the effectiveness of the orientation period of the program. During orientation, the results of administration of the questionnaire to the enrollee could be used to better schedule future activities of the enrollee, both through counseling and through upgrading where indicated. The information gained from the questionnaire could provide the training and counseling personnel with possible cues for the most effective program sequencing for each enrollee.

The questionnaire should be presented in a Likert-type response format and should include (a) those goals loading .50 or greater on the five factors identified in this report, (b) the Job Description Index, and (c) those psychological tests developed for this project that were significantly associated with one or more of the five identified factors.

(10) Questionnaires administered to personnel comparable to participants in this study should be either of the Likert-type response format, or—if the forced-choice format is used—the questionnaires should be relatively brief.

Chapter 5

SUMMARY

This project was undertaken to develop methodology to measure the world-of-work values, and changes in them as a function of experience with the work environment, of personnel entering Plan D of the Public Services Career (PSC) Program. In addition, the relationships between these values, and changes in them, to attainment of program objectives were to be studied.

Data were collected at two points in time, from three groups of subjects in five different locations, by means of the PSC Enrollee Questionnaire. The three subject groups were (a) entry-level enrollees in the PSC Program, (b) current Federal employees enrolled in the upgrade component of the PSC Program, (c) current Federal employees holding jobs roughly equivalent to those held by the entry-level personnel. These groups were similar in age and education. The median ages were, respectively, 25.4, 25.4, and 23.6. The mean years of education were, respectively, 11.0, 11.5, and 11.6.

For the first data collection, comparisons among the three groups as to world-of-work values and perceptions yielded few significant differences. Two categories of values were rated highest by all groups: (a) those values pertaining to benefits intrinsic to the job itself, and (b) those pertaining to the opportunity for self-development. Consensus was also obtained on the two value categories rated lowest: (a) those that reflected the gratification of various desires as a function of employment, and (b) those reflecting the instrumentality of having a job for obtaining respect and attention from friends. Entry-level personnel had just entered the PSC Program at the time of Session I. Females generally anticipated being more satisfied with their jobs than did males. The conclusion drawn as a result of Session I was that entry-level personnel were very similar to subjects in the other two groups.

Data collection Session II involved a six months' follow-up of the entry-level personnel. Attrition was low, and changes in world-of-work values and perceptions were minor. The changes that occurred seemed to reflect realistic appraisals of the jobs held and the working environment. The females generally expressed lower levels of satisfaction with many job and work environment aspects, including the stability (routine) of their present job.

PSC enrollees also completed a form rating their supervisor on the leader behaviors of Consideration and Initiation of Structure. Black enrollees felt that their supervisors engaged in fewer Consideration activities than did the white enrollees. Black female supervisors were seen as engaging in fewer Initiation of Structure activities than black male, white male, or white female supervisors.

Supervisors rated both PSC subordinates and their average non-PSC subordinate on five scales. There were no significant differences in the ratings given the two types of subordinates.

Reliabilities of the two response formats (Likert-type and forced-choice) used for alternate forms of the questionnaire were measured by the test-retest method. Those for the forced-choice format were generally low and not acceptable. Reliability coefficients for the Likert-type format were generally of a marginal level for use in individual measurement.

A factor analysis conducted on the ratings given 32 goals by entry-level personnel resulted in the identification of five factors. These were labeled Security Through Job Accomplishment, Social Interaction Orientation, Materialistic Orientation, Economic Instrumentality, and Esteem Satisfaction Through Work.

Several conclusions were advanced:

(1) The world-of-work values and perceptions of the PSC enrollee were, for the most part, congruent with those of the "middle-class value system."

(2) The presence of only a few changes in the world-of-work values and perceptions of the enrollees as a function of job experience, and the level of supervisory ratings, indicate the appropriateness of these values for the work environment.

(3) The "typical" PSC enrollee probably is underemployed in the entry jobs, and might continue to be after one promotion.

Several recommendations for future operation of the PSC Program were made.

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AND
APPENDICES

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Appendix A

TAXONOMY OF VALUES AND GOALS WITHIN EACH VALUE CATEGORY

Value Category	Goals
I. Extrinsic Benefits	1. Good pay
	2. Good working conditions, like air conditioning
	3. A good vacation each year
	4. A good retirement plan
	5. Being able to work close to home
	6. A good hospitalization plan
	7. A plan to pay doctor's bills
	8. Being able to keep the job as long as you want
II. Intrinsic Benefits	9. Being able to take pride in what you do
	10. Being able to do the type work you always wanted to do
	11. Knowing there is a good chance of being promoted
III. Gratification Demands	12. Feeling proud of your job
	13. A lot of time off without losing pay
	14. Being able to buy a lot of new things
	15. Being able to buy a lot of things I have always wanted
	16. Being able to buy things I need
IV. Interpersonal Relations with Co-Workers	17. Being able to work with people who think my work is good
	18. Being able to work with people who like me
	19. Being able to work with people who are friendly
	20. Being able to talk and have fun with the other people working there
	21. Being able to work with people who think as much of me as my friends do
V. Interpersonal Relations with Supervisor	22. A supervisor who is friendly
	23. A supervisor who treats everyone fairly
	24. A supervisor who tells you when you have done a good job on something
	25. A supervisor who helps when you need help
	26. A supervisor who is willing to help you with your off-the-job problems
VI. Interpersonal Relations with Family	27. Knowing your family is proud of the work you do
VII. Interpersonal Relations with Friends	28. Knowing your friends respect you for the work you do
	29. Having a job that is interesting to your friends
	30. Being something you can talk to your friends about after work
VIII. Developmental Needs	31. Being able to learn new things that will help you get a better job later
	32. Being able to learn to do something that is really hard

Appendix B

JOB DESCRIPTION INDEX[a]

Area of Job	Satisfaction
Work	Fascinating
	Routine
	Satisfying
	Boring
	Good
	Creative
	Respected
	Hot
	Pleasant
	Useful
	Tiresome
	Healthful
	Challenging
	On your feet
	Frustrating
	Simple
	Endless
	Gives sense of accomplishment
Supervision	Asks my advice
	Hard to please
	Impolite
	Praises good work
	Tactful
	Influential
	Up-to-date
	Doesn't supervise enough
	Quick tempered
	Tells me where I stand
	Annoying
	Stubborn
	Knows job well
	Bad
	Intelligent
	Leaves me on my own
	Lazy
	Around when needed
Pay	Income adequate for normal expenses
	Barely live on income
	Bad
	Income provides luxuries
	Insecure
	Less than I deserve
	Highly paid
	Underpaid
Promotions	Good opportunity for advancement
	Opportunity somewhat limited
	Promotion on ability
	Dead-end job
	Good chance for promotion
	Unfair promotion policy
	Infrequent promotions
	Regular promotions
	Fairly good chance for promotion

Area of Job	Satisfaction
Co-Workers	
	Stimulating
	Boring
	Slow
	Ambitious
	Stupid
	Responsible
	Fast
	Intelligent
	Easy to make enemies
	Talk too much
	Smart
	Lazy
	Unpleasent
	No privacy
	Active
	Narrow interests
	Loyal
	Hard to meet

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[a] Permission was obtained from Dr. Patricia Smith for inclusion of the JDI in this study.

Appendix C

PSYCHOLOGICAL TESTS AND ITEMS WITHIN EACH BY RESPONSE CONDITION

1. Cynical Distrust of People

The dimension assessed by this test reflects the fairly well substantiated finding that deprived persons, i.e., ghetto residents, seem not to be able to enter trusting relationships with other persons as well as the higher socioeconomic status individual. If social exchange theory is a good framework for looking at the world, then the ability to establish a relationship characterized by mutual trust, which is the first step for initiating an exchange relationship, is the key to the ability to interrelate with other persons, and also the ability to interrelate with organizations. Lacking trust, an individual can hardly be blamed for withholding commitment of his own. This, however, is a vicious circle, because the act of withholding commitment will lead the other to withhold commitment in turn, or to withdraw it, leaving the individual in a state of effective social isolation. Such social isolation theoretically should be counterproductive in the work environment.

a. Likert-Type Response Condition

(1) Everyone is out for himself at the expense of other people.
(2) Deep down inside, most people would rather not help the other person.
(3) Most people avoid helping someone in trouble.
(4) Most people are honest, really.
(5) The world we live in is mostly a friendly place.
(6) Most people who trust others are treated fairly in return.

b. Forced-Choice Response Condition

(1) a. Everyone is out for himself at the expense of other people.
    b. People are really interested in helping others.

(2) a. You just don't have any friends when you're in trouble.
    b. People are really helpful when you have trouble.

(3) a. Most people are really honest.
    b. People are honest only if they think they'll get caught if they break any rules.

(4) a. People who trust others get fair treatment.
    b. If you trust others they will really take advantage of you.

2. Cynical Distrust of Organizations

In order to achieve adjustment within the work situation, not only must the individual be able to establish trusting relationships with others, but also he must have some faith in the integrity of the organization. The less distrustful the individual is of organizations, *per se*, the greater is the likelihood that he will adjust successfully to the work environment. This test was constructed to assess the extent of such distrust by the individual.

a. Likert-Type Response Condition

(1) If companies could they would pay you less for a day's work.

(2) Companies are always looking for ways to make people do more work for the same pay.

(3) Most companies want my kind of people to get good jobs.

(4) It's a good thing that we have labor unions to stick up for the people.

(5) Big business really doesn't care about the little guy.

b. Forced-Choice Response Condition

(1) a. If companies could they would pay you less for a day's work.
    b. Most companies want to pay you a fair wage.

(2) a. Most companies will pay overtime if they ask you to do any extra work.
    b. Companies are always looking for ways to get more work for the same pay.

(3) a. Most companies want my kind of people to get good jobs.
    b. Very few companies are interested in my kind of people getting good jobs.

(4) a. Big business doesn't care about the little guy.
    b. Big business really wants to help the little guy.

3. Weak Self Regard

The history of the deprived person is characterized by failure, both occupationally and educationally. While it is very probable that this failure can be attributed to a major extent to obstacles in the environment, and to discrimination--a defense that leads to apathy or to hostile aggression, depending on other factors--there can be little doubt that a history of failure can and probably does impact negatively on the individual's self-concept, and his regard for himself. This test was designed to assess such attitudes, as individuals holding these attitudes could be expected to be lower in upward occupational mobility and less certain of their work performance.

a. Likert-Type Response Condition

(1) At times, I think I am no good at all.

(2) I have often felt that strangers were looking at me as if something might be wrong with me.

(3) I often feel completely unable to do anything worthwhile.

(4) People like me don't have any say in what the government does.

(5) Most of the people in my work group feel they are better than me.

b. Forced-Choice Response Condition

(1) a. At times, I think I am no good at all.
    b. I seldom have any doubts about myself.

(2) a. I hardly ever feel that strangers are looking at me as if something might be wrong with me.
    b. I have often felt that strangers were looking at me as if something might be wrong with me.

(3) a. I often feel completely unable to do anything worthwhile.
b. I seldom feel completely unable to do anything worthwhile.

(4) a. By voting, I have something to say about what the government does.
b. People like me don't have any say in what the government does.

(5) a. Most people I work with feel they are better than me.
b. Few people I work with feel they are better than me.

4. Achievement Motivation

This test was constructed to reflect the respondents' interest in relative status achieved through occupational means and, as such, can be expected to relate to long-term employability of the PSC worker.

a. Likert-Type Response Condition

(1) Children ought to try to reach a higher station in life than their parents.

(2) One earns the greatest respect from others if he advances to higher positions in life.

(3) People respect someone who gets ahead.

(4) Most people will work harder to get a better job.

(5) It would be good to have a supervisor's job some day.

(6) If you are not really good at a job, you should quit and try something else.

(7) Having a job you do well is more important than how much money you make.

b. Forced-Choice Response Condition

(1) a. People should be happy to have the same kind of work as their parents did.
b. Children ought to try to reach a higher station in life than their parents.

(2) a. People respect you if you get ahead.
b. You don't have to get ahead for people to respect you.

(3 a. Getting a better job is not worth working harder.
b. People will work harder to get a better job.

(4) a. It would be good to have a supervisor's job some day.
b. I would not want a supervisor's job.

(5) a. You should not be expected to be really good at your job.
b. If you are not really good at a job, you should quit and try something else.

(6) a. Having a job you do well is more important than how much money you make.
b. The salary you receive is more important than how well you are able to do your job.

5. Time Sense

Responses to this test are interpreted as the ability and/or desire to delay gratification of immediate needs in order to obtain gratification of more central needs at a later time. Conceptually, this requires ability to think beyond an immediate time frame, e.g., to anticipate developments, and a history of prior experiences leading to the expectation that persons who defer gratification do, in fact, obtain payoffs for their short-term self-denial, e.g., will not have lost in the long run.

When the environment is generally noxious, apathy is a defense against the continued strain of unpleasantness, as is escape (in the form of day dreams, fantasies, etc. and probably intoxication, drugs, etc., as well). It is probable that escape and avoidance have similar utilities here, so that the deprived person may escape the harshness of the future, and the apparent prison of the present, by avoiding thinking about it. To the extent that the worker wishes to escape contemplation of a bleak future, increased attention in the form of time and money will be given present needs, irrespective of the centrality of such needs. Such a frame of reference may be associated with a lower need for achievement by the individual.

a. Likert-Type Response Condition

(1) People who save for a rainy day miss out on a lot of living.
(2) A lot of people don't know from one day to the next what they will be doing.
(3) Most people spend their money as fast as they make it.
(4) Most people try not to think about the future.
(5) Making a budget is a waste of time; they never work.
(6) It is more important to take care of present needs than to build for the future.
(7) Tomorrow will take care of itself, so why be worried.
(8) A supervisor shouldn't mind if a person misses work on some days.

b. Forced-Choice Response Condition

(1) a. People who save for a rainy day miss out on a lot of living.
    b. People who save money enjoy life just as much as those that spend their money quickly.
(2) a. Most people try not to think about the future.
    b. You have to plan ahead to really have anything.
(3) a. Making a budget is a waste of time; they never work.
    b. People that don't make budgets never have any money left.
(4) a. It's more important to take care of present needs than to build for the future.
    b. Sometimes it's necessary to sacrifice now so as to have something in the future.
(5) a. If you have to miss work you should tell someone that you won't be there.
    b. A supervisor shouldn't mind if you don't show up for work some of the time.

6. Protestant Ethic

An important factor in adjusting to the work environment is the extent to which the individual values work in general. The more the individual sees work as an end in itself, the greater will be his investment in the work situation. The individual who subscribes to such values attaches a higher worth to work in general and will be reluctant to waste time engaging in extra-work activities, at least insofar as they may be perceived as trivial.

a. Likert-Type Response Condition

(1) When the workday is finished, a person should forget his job and enjoy himself.

(2) Wasting time is as bad as wasting money.

(3) People who "do things the easy way" are the smart ones.

(4) Hard work makes a man a better person.

(5) If a man is given more responsibility, he will work harder.

(6) If a person doesn't feel like working, it should be o.k. for him to stay home that day.

b. Forced-Choice Response Condition

(1) a. When the workday is finished, a person should forget his job and enjoy himself.
b. A person should never quit thinking about how he can do his job better.

(2) a. Wasting time is as bad as wasting money.
b. Time is never wasted if you are enjoying yourself.

(3) a. People who "do thing the easy way" are the smart ones.
b. People who break rules will never get ahead.

(4) a. Hard work makes a man a better person.
b. Hard work has nothing to do with how a person turns out.

(5) a. If a man is given more responsibility he will work harder.
b. Getting more responsibility doesn't mean a man should work harder.

(6) a. A person should not miss a day of work for any reason.
b. If a person doesn't feel like working it should be o.k. for him to stay home that day.

7. Expectation of Success

An important facet of an individual's level of achievement motivation is represented by his view of the world and his subjective probability of attaining desired goals. If the individual has a low expectation, an expectancy of frustration, it is quite likely that his initial response to a situation perceived as potentially frustrating will be withdrawal from the field, in this case, voluntary termination of employment. This test was developed to tap the individual's generalized expectancy of success in attaining any goal.

a. Likert-Type Response Condition

(1) If you try hard enough, you can usually get what you want.

(2) Those that want a lot out of life usually get it.

(3) The people I know don't have much chance to get good jobs.

(4) Most people want too much out of life.

(5) Most people never get the thing they want most in life.

(6) I have always gotten those things that I wanted most.

b. Forced-Choice Response Condition

(1) a. Most people never get the thing they want most in life.
b. If you try hard enough, you can usually get what you want.

(2) a. Those that want a lot out of life usually get it.
b. Most people want too much out of life.

(3) a. The people I know don't have much chance to get good jobs.
b. If you try hard enough you can usually get what you want.

(4) a. I have always gotten those things I really wanted.
b. When I didn't get them, I knew that I really didn't need the things that I had really wanted.

Tests No. 8 through 12 constitute instruments intended to measure alienation from work. As reflected in these tests, it could be expected to result in the worker failing to adjust to the world-of-work.

8. Powerlessness

This test was included to tap the belief that the individual has little control over the forces that determine his outcomes in life. As such it is very similar to a negative pole of the test measuring achievement motivation.

a. Likert-Type Response Condition

(1) People who have good jobs have gotten them through hard work.

(2) No matter how hard I work, it won't do much good.

(3) A man holds his job mainly because his boss likes him.

(4) I have very little control over many of the things that happen to me.

b. Forced-Choice Response Condition

(1) a. People who have good jobs have gotten them through hard work.
b. A man holds his job mainly because his boss likes him.

(2) a. No matter how hard I work, it won't do much good.
b. What I do pretty well decides what happens to me.

9. Meaninglessness

This test was designed to reflect the individual's belief that his work is a means of achieving other than immediate goals and, as such, constitutes an indirect assessment of gratification deferral.

a. Likert-Type Response Condition

(1) Most people know what they want in life, and are willing to sacrifice to get it.

(2) The lives of most people have little meaning or purpose.

(3) Most people consider their jobs very important.

(4) My job is not really necessary.

b. Forced-Choice Response Condition

(1) a. Most people know what they want in life and are willing to sacrifice to get it.
b. The lives of most people have little meaning or purpose.

(2) a. My job is not really necessary.
b. My job is important.

10. Normlessness

The purpose of this test was to reflect the individual's perception that some goals cannot be attained by means of socially approved behavior.

a. Likert-Type Response Condition

(1) Most people don't care what they have to do to get ahead.

(2) It usually pays to live by the rules.

(3) Most rules are made to be broken every now and then.

(4) Most supervisors don't care if you break the rules now and then, if nobody gets caught.

(5) I don't want anything that I would have to break any rules to get.

b. Forced-Choice Response Condition

(1) a. Most people don't care what they have to do to get ahead.
b. It usually pays to live by the rules.

(2) a. People who break the rules should be fired.
b. Most rules are made to be broken now and then.

11. Value Isolation

This test was designed to assess the extent to which the individual feels himself isolated from the majority of the members of the society and the goals they value; it perhaps also reflects the degree to which the respondent thus feels discriminated against.

a. Likert-Type Response Condition

(1) The laws were not made to help ordinary people.

(2) The opinions of the people I work with are important to me.

(3) The people I work with don't really understand me and how I feel.

b. Forced-Choice Response Condition

(1) a. The laws were made for ordinary people like me.
b. Nobody cares what happens to the average person.

(2) a. The opinions of the people I work with are very important to me.
b. The people I work with usually don't understand me and how I feel.

12. Self-Estrangement

This test was constructed to focus on the individual's willingness and potential for initiating exchange (social exchange) with others--his ability to trust their motives and them. The extent to which the individual is able to enter into meaningful relations with others is used as an indication of the degree of his self-estrangement.

a. Likert-Type Response Condition

(1) On week-ends, I spend a lot of time just looking for something to do.

(2) I usually have a good time when I am with people.

(3) It is best not to be too friendly with people at work.

(4) Most people at work will go out of their way to be helpful.

(5) When you are new on the job, you can't trust anyone.

b. Forced-Choice Response Condition

(1) a. Most people don't really get much enjoyment out of life.
b. Most people do really interesting things.

(2) a. Most people at work are really helpful.
b. It's best not to be too friendly with people at work.

(3) a. Most people think that what you want is not important.
    b. I want the same thing out of life that most people do.

13. Work Demands

The target positions for entry-level PSC enrollees are generally low intensity with respect to the range and variability of demands made on the position occupant. The more highly the PSC enrollee values this type of position, the more likely he will be to remain in the program and in the target position subsequent to completion of the program. This test was developed to assess respondents' preferred levels of job demands.

a. Likert-Type Response Condition

(1) The job that you would consider ideal would be one where the work is always the same.

(2) If I could do as I pleased, I would change the kind of work I do every few months.

(3) A person can never feel at ease on a job where the ways of doing things are always being changed.

(4) I think that it would be better to stay with a job that you know you can handle than to change to a job where most things would be new.

(5) After someone learns a job really well, it is better not to change jobs unless there is really a big pay increase.

(6) One of the most important things about a job is being able to stay busy all the time.

b. Forced-Choice Response Condition

(1) The ideal job would be where:

a. The work is never the same.
b. The work is always the same.

(2) People are not at ease on a job if the way of doing things is changed very much.

a. Agree
b. Disagree

(3) After you have learned to do a job well:

a. It's best to stay with it.
b. It's best to try a new job.

(4) It's better if a job keeps you busy instead of letting you have time to think.

a. Agree
b. Disagree

(5) When you know how to handle a job it's best not to change jobs unless there is a large pay increase.

a. Disagree
b. Agree

14. Orientation Toward Work

The individual's orientation toward work does not develop in a vaccuum, but is heavily influenced by his perception of his reference group's evaluation of work in general and different positions and occupations in particular. To the extent that his reference groups do not attach high value to work and occupational status, the PSC enrollee who maintains membership in the program will likely either reinterpret cues concerning his reference group's orientation toward work, or, in some cases, will select other, and different, reference groups. This test provides an indirect assessment of any changes in reference groups by reflecting changes in the individual's orientation toward work and occupational status.

(1) If you were out of work, which would you rather do?

a. Go on welfare.
b. Take a job as a car washer that paid the same as welfare.

(2) If by some chance you had enough money to live comfortably without working, do you think that you would work anyway, or would you not work?

a. Would not work
b. Would work anyway

(3) Which kind of work would you rather have?

a. Average pay from work that is looked down on by the people you know.
b. Low pay from work that is respected by the people you know.

(4) Is the most important thing about getting a promotion:

a. Getting more pay?
b. Getting more respect from friends and neighbors?

(5) Which job would you choose if you could be sure of keeping either job?

a. Better than average pay as a truck driver.
b. Less than average pay as a bank clerk.

(6) If you could be sure that your income would go up steadily without getting a promotion, would you care about being promoted?

a. No
b. Yes

Appendix D

ASSESSMENT OF SUPERVISORY INFLUENCES ITEMS WITHIN EACH DIMENSION

A. Consideration

The larger the score, the more the respondent believed that his supervisor exhibited such behavior. A high score reflects an interpersonal orientation in the leader's behavior, often characterized by feelings of mutual trust, openness to subordinate's ideas and requests, and consideration for their feelings.

1. Does personal favors for us.
2. Does little things that make it a pleasure to work here.
3. Is easy to understand.
4. Finds time to listen to us.
5. Does not associate with us.
6. Looks out for our welfare.
7. Refuses to explain actions taken.
8. Does things without asking us about them.
9. Is slow to accept new ideas.
10. Treats all of us as his equals.
11. Is willing to make changes.
12. Is friendly and easy to get to talk to.
13. When talking to us, makes us feel at ease.
14. Puts our suggestions into operation.
15. Gets approval from us before going ahead on important matters.

B. Initiation of Structure

The larger the score, the more the respondent believed that his supervisor exhibited such behavior. A high score on this dimension would indicate a leader who endeavors to establish well-defined patterns of organization, channels of communication, and ways of doing a job.

1. Makes his attitude clear to us.
2. Tries out new ideas with us.
3. Is very firm with us.
4. Finds fault with poor work.
5. Speaks in a manner not to be questioned.
6. Assigns us to particular tasks.
7. Works without a plan.
8. Tells us we have to meet particular standards of performance.
9. Tells us that we need to meet deadlines.
10. Encourages the use of uniform ways of doing things.
11. Makes sure that everyone understands his own part in the job.

12. Asks that we all follow standard operating procedures.

13. Lets us know what is expected of us.

14. Sees to it that we are working as much as we should be.

15. Sees to it that the work done by each of us doesn't get in the way of what the others are doing.

Appendix E

ITEMS WITHIN INVENTORY FOR SUPERVISORS AND SUPERVISOR'S RATING FORM

A. Inventory for Supervisors (LPC)

High scores on this questionnaire reflect an interpersonal orientation, with the leader behaving so as to increase member satisfaction, usually in a pleasant nondirective fashion. Low scores indicate a greater task orientation on the part of the leader, often in a directive punitive manner, and a low degree of concern for pleasant interpersonal relations. The items for this questionnaire consisted of 16 pairs of bi-polar adjectives, separated by an eight-point scale, ascending in numerical value from the more negative of the bi-polar adjectives.

Items

Pleasant -- Unpleasant
Unfriendly -- Friendly
Accepting -- Rejecting
Helpful -- Frustrating
Unenthusiastic -- Enthusiastic
Tense -- Relaxed
Close -- Distant
Warm -- Cold
Cooperative -- Uncooperative
Hostile -- Supportive
Interesting -- Boring
Quarrelsome -- Harmonious
Self-Assured -- Hesitant
Efficient -- Inefficient
Gloomy -- Cheerful
Open -- Guarded

B. Supervisor's Rating Form

The five dimensions contained in this questionnaire were to assess all aspects of a supervisor's judgment of a subordinate. The direction of scoring was chosen so that the higher the score for a given dimension, the more the supervisor believed that dimension characterized the subordinate being rated.

Performance of the Worker

1. Knows as much about the job as the other workers.
2. Will never be able to do well in this job.
3. Could fill in for any of the other workers.
4. Helps any of the other workers that need assistance.
5. Frequently makes the same mistake.

Adjustment of the Worker

1. Has adjusted well to the work we do.
2. Follows orders well.
3. Mixes well with the other workers.
4. Thinks that other workers get treated differently.
5. Often complains about what some of the other workers have done.

Motivation of the Worker

1. Works about as hard as the other workers.
2. Is working hard now, but just to build up a name, will soon start slacking off.
3. Is frequently a little late in getting to work.
4. Looks for any chance to quit work.
5. Has often missed work.

Stability of the Worker

1. Is a steadying influence for the other workers.
2. Gets excited over small incidents.
3. Can be relied on to do work without being constantly checked on.
4. Is asked by the other workers for advice.
5. Helps smooth over differences between other workers.

Potential of the Worker

1. I don't think this worker would ever be fired.
2. This worker is capable of more demanding work.
3. I think this person is one of those workers that are happier with their present job than they would be with a higher level job.
4. This person is capable of showing new workers how to do the job.
5. This person should be given extra training, so as to be in line for a promotion.

Appendix F

RATINGS OF GOALS: LIKERT-TYPE CONDITION

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
1. Good pay								
A. Entry - Male:								
(1) Session I	4.58	67	.69	.13	NS	A(1)vsB(1)	1.31	NS
(2) Session II	4.56	48	.64			A(2)vsB(2)	.85	NS
B. Entry - Female:						A(1)vsC(1)	.86	NS
(1) Session I	4.39	49	.88	.16	NS	B(1)vsC(2)	.46	NS
(2) Session II	4.42	57	.97					
C. Upgrade, Session I:						B(1)vsD(2)	1.97	NS
(1) Male	4.74	19	.64	1.08	NS	C(2)vsD(2)	1.37	NS
(2) Female	4.48	29	.86					
D. Equivalent, Session I:								
(1) Male	5.00	5	.00					
(2) Female	4.76	29	.62					
2. Good working conditions, like air conditioning								
A. Entry - Male:								
(1) Session I	3.73	67	1.24	1.79	NS	A(1)vsB(1)	1.91	NS
(2) Session II	3.31	48	1.19			A(2)vsB(2)	3.46	<.01
B. Entry - Female:						A(1)vsC(1)	.31	NS
(1) Session I	3.29	49	1.21	3.55	<.01	B(1)vsC(2)	.71	NS
(2) Session II	4.05	57	.97					
C. Upgrade, Session I:						B(1)vsD(2)	.09	NS
(1) Male	3.53	19	1.04	.46	NS	C(2)vsD(2)	.60	NS
(2) Female	3.48	29	1.07					
D. Equivalent, Session I:								
(1) Male	4.20	5	1.17					
(2) Female	3.31	29	1.05					
3. A good vacation each year								
A. Entry - Male:								
(1) Session I	4.31	67	.95	2.10	<.05	A(1)vsB(1)	4.61	<.001
(2) Session II	3.91	49	1.02			A(2)vsB(2)	.18	NS
B. Entry - Female:						A(1)vsC(1)	2.41	<.02
(1) Session I	3.35	49	1.29	2.18	<.05	B(1)vsC(2)	1.18	NS
(2) Session II	3.87	57	1.17					
C. Upgrade, Session I:						B(1)vsD(2)	1.94	NS
(1) Male	3.68	19	1.13	.01	NS	C(2)vsD(2)	.76	NS
(2) Female	3.69	29	1.12					
D. Equivalent, Session I:								
(1) Male	4.80	5	.40					
(2) Female	3.93	29	1.23					
4. A good retirement plan								
A. Entry - Male:								
(1) Session I	4.52	67	1.00	.50	NS	A(1)vsB(1)	1.59	NS
(2) Session II	4.42	49	.88			A(2)vsB(2)	.95	NS
B. Entry - Female:						A(1)vsC(1)	.65	NS
(1) Session I	4.22	49	.97	.12	NS	B(1)vsC(2)	.65	NS
(2) Session II	4.24	57	1.06					

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:						B(1)vsD(2)	.37	NS
(1) Male	4.68	19	.65	2.18	<.05	C(2)vsD(2)	.25	NS
(2) Female	4.07	29	1.08					
D. Equivalent, Session I:								
(1) Male	4.40	5	.80					
(2) Female	[illegible]	29	.97					
5. Being able to work close to home								
A. Entry - Male:								
(1) Session I	3.82	67	1.30	.96	NS	A(1)vsB(1)	1.54	NS
(2) Session II	3.58	48	1.27			A(2)vsB(2)	.42	NS
B. Entry - Female:						A(1)vsC(1)	.24	NS
(1) Session I	3.45	49	1.21	.09	NS	B(1)vsC(2)	.5[illegible]	NS
(2) Session II	3.47	57	1.31					
C. Upgrade, Session I:						B(1)vsD(2)	.25	NS
(1) Male	3.74	19	1.29	1.20	NS	C(2)vsD(2)	.23	NS
(2) Female	3.31	29	1.09					
D. Equivalent, Session I:								
(1) Male	3.20	5	1.33					
(2) Female	3.38	29	1.10					
6. A good hospitalization plan								
A. Entry - Male:								
(1) Session I	4.45	67	.87	1.62	NS	A(1)vsB(1)	2.69	<.01
(2) Session II	4.14	48	1.11			A(2)vsB(2)	.13	NS
B. Entry - Female:						A(1)vsC(1)	.34	NS
(1) Session I	3.92	49	1.23	1.09	NS	B(1)vsC(2)	.94	NS
(2) Session II	4.17	57	1.14					
C. Upgrade, Session I:						B(1)vsD(2)	1.33	NS
(1) Male	4.37	19	[illegible]	.67	NS	C(2)vsD(2)	.40	NS
(2) Female	4.17	29	.99					
D. Equivalent, Session I:								
(1) Male	5.00	5	.00					
(2) Female	4.28	29	.94					
7. A plan to pay doctor's bills								
A. Entry - Male:								
(1) Session I	4.16	67	.87	.47	NS	A(1)vsB(1)	4.65	<.001
(2) Session II	4.24	49	1.02			A(2)vsB(2)	.86	NS
B. Entry - Female:						A(1)vsC(1)	1.63	NS
(1) Session I	2.92	49	1.76	3.87	<.01	B(1)vsC(2)	.32	NS
(2) Session II	4.05	57	1.20					
C. Upgrade, Session I:						B(1)vsD(2)	1.98	NS
(1) Male	3.68	19	1.22	.17	NS	C(2)vsD(2)	.10	NS
(2) Female	3.62	29	1.24					
D. Equivalent, Session I:								
(1) Male	4.40	5	.80					
(2) Female	3.66	29	1.18					

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
8. Being able to keep the job as long as you want								
A. Entry - Male:								
(1) Session I	4.63	67	.73	1.63	NS	A(1)vsB(1)	.51	NS
(2) Session II	4.39	48	.78			A(2)vsB(2)	1.87	NS
B. Entry - Female:						A(1)vsC(1)	1.26	NS
(1) Session I	4.55	49	.83	.78	NS			
(2) Session II	4.66	57	.68			B(1)vsC(2)	.54	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.04	NS
(1) Male	4.37	19	.93	1.14	NS	C(2)vsD(2)	1.45	NS
(2) Female	4.66	29	.76					
D. Equivalent, Session I:								
(1) Male	4.20	5	.98					
(2) Female	4.34	29	.84					
9. Being able to take pride in what you do								
A. Entry - Male:								
(1) Session I	4.57	67	.78	2.63	<.01	A(1)vsB(1)	.58	NS
(2) Session II	4.12	48	1.01			A(2)vsB(2)	.24	NS
B. Entry - Female:						A(1)vsC(1)	1.16	NS
(1) Session I	4.47	49	.99	1.46	NS			
(2) Session II	4.17	57	1.04			B(1)vsC(2)	.22	NS
C. Upgrade, Session I:						B(1)vsD(2)	.70	NS
(1) Male	4.79	19	.52	1.32	NS	C(2)vsD(2)	.91	NS
(2) Female	4.52	29	.77					
D. Equivalent, Session I:								
(1) Male	3.80	5	1.47					
(2) Female	4.31	29	.91					
10. Being able to do the type work you always wanted to do								
A. Entry - Male:								
(1) Session I	4.46	67	.94	.05	NS	A(1)vsB(1)	.40	NS
(2) Session II	4.46	49	.78			A(2)vsB(2)	.49	NS
B. Entry - Female:						A(1)vsC(1)	.71	NS
(1) Session I	4.53	49	.79	.09	NS	B(1)vsC(2)	.44	NS
(2) Session II	4.54	57	.75			B(1)vsD(2)	1.20	NS
C. Upgrade, Session I:								
(1) Male	4.63	19	.74	.77	NS	C(2)vsD(2)	.68	NS
(2) Female	4.45	29	.81					
D. Equivalent, Session I:								
(1) Male	3.00	5	1.26					
(2) Female	4.28	29	1.05					
11. Knowing there is a good chance of being promoted								
A. Entry - Male:								
(1) Session I	4.67	67	.68	1.17	NS	A(1)vsB(1)	.30	NS
(2) Session II	4.51	49	.75			A(2)vsB(2)	.10	NS
B. Entry - Female:						A(1)vsC(1)	.37	NS
(1) Session I	4.63	49	.69	.70	NS			
(2) Session II	4.52	57	.79			B(1)vsC(2)	1.03	NS
						B(1)vsD(2)	.57	NS

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:								
(1) Male	4.74	19	.64	1.15	NS	C(2)vsD(2)	1.29	NS
(2) Female	4.43	28	1.02					
D. Equivalent, Session I:								
(1) Male	4.60	5	.80					
(2) Female	4.72	29	.64					
12. Feeling proud of your job								
A. Entry - Male:								
(1) Session I	4.25	67	1.10	.71	NS	A(1)vsB(1)	2.10	<.05
(2) Session II	4.10	49	1.07			A(2)vsB(2)	1.10	NS
B. Entry - Female:						A(1)vsC(1)	.75	NS
(1) Session I	4.63	49	.69	1.65	NS			
(2) Session II	4.33	57	1.06			B(1)vsC(2)	.98	NS
C. Upgrade, Session I:						B(1)vsD(2)	2.13	<.05
(1) Male	4.47	19	1.14	.08	NS	C(2)vsD(2)	.84	NS
(2) Female	4.45	29	.93					
D. Equivalent, Session I:								
(1) Male	4.60	5	.80					
(2) Female	4.24	29	.90					
13. A lot of time off without losing pay								
A. Entry - Male:								
(1) Session I	2.90	67	1.46	1.71	NS	A(1)vsB(1)	.13	NS
(2) Session II	2.46	49	1.10			A(2)vsB(2)	1.32	NS
B. Entry - Female:						A(1)vsC(1)	.40	NS
(1) Session I	2.86	49	1.44	.26	NS			
(2) Session II	2.78	57	1.32			B(1)vsC(2)	.02	NS
C. Upgrade, Session I:						B(1)vsD(2)	.51	NS
(1) Male	3.05	19	1.47	.47	NS	C(2)vsD(2)	.50	NS
(2) Female	2.86	29	1.25					
D. Equivalent, Session I:								
(1) Male	3.00	5	1.41					
(2) Female	2.69	29	1.32					
14. Being able to buy a lot of new things								
A. Entry - Male:								
(1) Session I	3.10	67	1.28	.63	NS	A(1)vsB(1)	2.07	<.05
(2) Session II	2.95	48	.97			A(2)vsB(2)	.61	NS
B. Entry - Female:						A(1)vsC(1)	.47	NS
(1) Session I	2.61	49	1.21	.91	NS			
(2) Session II	2.82	57	1.18			B(1)vsC(2)	.09	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.49	NS
(1) Male	3.26	19	1.21	1.96	NS	C(2)vsD(2)	1.48	NS
(2) Female	2.59	29	1.10					
D. Equivalent, Session I:								
(1) Male	3.60	5	1.02					
(2) Female	3.03	29	1.16					
15. Being able to buy things I have always wanted								
A. Entry - Male:								
(1) Session I	3.49	67	1.32	.79	NS	A(1)vsB(1)	.57	NS
(2) Session II	3.31	48	.91			A(2)vsB(2)	.53	NS

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
B. Entry - Female:						A(1)vsC(1)	.03	NS
(1) Session I	3.35	49	1.38	.27	NS			
(2) Session II	3.42	57	1.22			B(1)vsC(2)	.22	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.04	NS
(1) Male	3.47	19	1.19	.53	NS	C(2)vsD(2)	1.18	NS
(2) Female	3.28	29	1.26					
D. Equivalent, Session I:								
(1) Male	3.80	5	.75					
(2) Female	3.69	29	1.39					
16. Being able to buy things I need								
A. Entry - Male:								
(1) Session I	4.27	67	1.04	1.20	NS	A(1)vsB(1)	2.10	<.05
(2) Session II	4.04	48	.93			A(2)vsB(2)	.00	NS
B. Entry - Female:						A(1)vsC(1)	.40	NS
(1) Session I	3.82	49	1.24	.92	NS			
(2) Session II	4.03	57	1.13			B(1)vsC(2)	.08	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.28	NS
(1) Male	4.16	19	1.04	1.05	NS	C(2)vsD(2)	1.24	NS
(2) Female	3.79	29	1.21					
D. Equivalent, Session I:								
(1) Male	4.00	5	.89					
(2) Female	4.17	29	1.05					
17. Being able to work with people who think my work is good								
A. Entry - Male:								
(1) Session I	4.24	67	.93	2.38	<.05	A(1)vsB(1)	1.90	NS
(2) Session II	3.78	47	1.07			A(2)vsB(2)	.59	NS
B. Entry - Female:						A(1)vsC(1)	.52	NS
(1) Session I	3.88	49	1.08	.16	NS			
(2) Session II	3.91	57	1.06			B(1)vsC(2)	1.15	NS
C. Upgrade, Session I:						B(1)vsD(2)	.59	NS
(1) Male	4.11	19	1.07	.20	NS	C(2)vsD(2)	1.50	NS
(2) Female	4.17	29	1.08					
D. Equivalent, Session I:								
(1) Male	4.20	5	.75					
(2) Female	3.72	29	1.14					
18. Being able to work with people who like me								
A. Entry - Male:								
(1) Session I	4.00	67	1.05	2.51	<.05	A(1)vsB(1)	1.86	NS
(2) Session II	3.44	47	1.26			A(2)vsB(2)	.24	NS
B. Entry - Female:						A(1)vsC(1)	.58	NS
(1) Session I	3.59	49	1.28	.82	NS			
(2) Session II	3.38	57	1.26			B(1)vsC(2)	.99	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.42	NS
(1) Male	3.84	19	.93	.07	NS	C(2)vsD(2)	2.46	<.02
(2) Female	3.86	29	.90					
D. Equivalent, Session I:								
(1) Male	4.20	5	.75					
(2) Female	3.17	29	1.18					

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
19. Being able to work with people who are friendly								
A. Entry - Male:								
(1) Session I	4.24	67	1.04	1.32	NS	A(1)vsB(1)	.35	NS
(2) Session II	4.47	48	.79			A(2)vsB(2)	2.12	<.05
B. Entry - Female:								
(1) Session I	4.31	49	.97	1.05	NS	A(1)vsC(1)	.28	NS
(2) Session II	4.10	57	.96			B(1)vsC(2)	.72	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.62	NS
(1) Male	4.32	19	.92	.60	NS	C(2)vsD(2)	.25	NS
(2) Female	4.14	29	1.01					
D. Equivalent, Session I:								
(1) Male	4.80	5	.40					
(2) Female	4.07	29	.98					
20. Being able to talk and have fun with the other people working there								
A. Entry - Male:								
(1) Session I	3.73	67	1.33	1.53	NS	A(1)vsB(1)	2.08	<.05
(2) Session II	3.35	48	1.21			A(2)vsB(2)	2.12	<.05
B. Entry - Female:								
(1) Session I	3.20	49	1.34	1.41	NS	A(1)vsC(1)	.01	NS
(2) Session II	2.85	57	1.14			B(1)vsC(2)	.46	NS
C. Upgrade, Session I:						B(1)vsD(2)	.54	NS
(1) Male	3.74	19	1.07	1.12	NS	C(2)vsD(2)	.93	NS
(2) Female	3.34	29	1.21					
D. Equivalent, Session I:								
(1) Male	4.20	5	1.60					
(2) Female	3.03	29	1.27					
21. Being able to work with people who think as much of me as my friends do								
A. Entry - Male:								
(1) Session I	3.70	67	1.20	1.30	NS	A(1)vsB(1)	1.89	NS
(2) Session II	3.39	48	1.27			A(2)vsB(2)	1.69	NS
B. Entry - Female:								
(1) Session I	3.29	49	1.29	1.26	NS	A(1)vsC(1)	.51	NS
(2) Session II	2.96	57	1.29			B(1)vsC(2)	.20	NS
C. Upgrade, Session I:						B(1)vsD(2)	.08	NS
(1) Male	3.89	19	1.17	1.57	NS	C(2)vsD(2)	.11	NS
(2) Female	3.34	29	1.15					
D. Equivalent, Session I:								
(1) Male	4.00	5	1.10					
(2) Female	3.31	29	1.12					
22. A supervisor who is friendly								
A. Entry - Male:								
(1) Session I	3.99	67	1.18	1.25	NS	A(1)vsB(1)	.54	NS
(2) Session II	3.70	48	1.17			A(2)vsB(2)	.97	NS
B. Entry - Female:								
(1) Session I	4.10	49	1.05	.79	NS	A(1)vsC(1)	.39	NS
(2) Session II	3.92	57	1.13			B(1)vsC(2)	.29	NS

Goals	Mean	N	S.D.	z	p	Additional Comparisons	t	p
C. Upgrade, Session I:						B(1)vsD(2)	.01	NS
(1) Male	4.11	19	1.02	.21	NS	C(2)vsD(2)	.26	NS
(2) Female	4.17	29	1.05					
D. Equivalent, Session I:								
(1) Male	4.60	5	.80					
(2) Female	4.10	29	.92					
23. A supervisor who treats everyone fairly								
A. Entry - Male:								
(1) Session I	4.54	67	.92	.90	NS	A(1)vsB(1)	.46	NS
(2) Session II	4.38	47	.88			A(2)vsB(2)	.99	NS
B. Entry - Female:						A(1)vsC(1)	.55	NS
(1) Session I	4.61	49	.72	2.38	<.05			
(2) Session II	4.19	57	1.01			B(1)vsC(2)	1.18	NS
C. Upgrade, Session I:						B(1)vcD(2)	.25	NS
(1) Male	4.47	19	.88	1.58	NS	C(2)vsD(2)	.85	NS
(2) Female	4.79	29	.48					
D. Equivalent, Session I:								
(1) Male	4.80	5	.40					
(2) Female	4.66	29	.71					
24. A supervisor who tells you when you have done a good job on something								
A. Entry - Male:								
(1) Session I	3.90	67	1.09	.17	NS	A(1)vsB(1)	1.05	NS
(2) Session II	3.93	47	1.05			A(2)vsB(2)	.40	NS
B. Entry - Female:						A(1)vnC(1)	.73	NS
(1) Session I	4.10	49	.93	.45	NS			
(2) Session II	4.01	57	.96			B(1)vsC(2)	.90	NS
C. Upgrade, Session I:						B(1)vsD(2)	.01	NS
(1) Male	4.11	19	1.07	.64	NS	C(2)vsD(2)	.81	NS
(2) Female	4.31	29	1.05					
D. Equivalent, Session I:								
(1) Male	4.20	5	.75					
(2) Female	4.10	29	.84					
25. A supervisor who helps when you need help								
A. Entry - Male:								
(1) Session I	4.55	67	.92	.43	NS	A(1)vsB(1)	1.03	NS
(2) Session II	4.47	48	.76			A(2)vsB(2)	.40	NS
B. Entry - Female:						A(1)vsC(1)	1.13	NS
(1) Session I	4.71	49	.67	1.13	NS			
(2) Session II	4.54	57	.83			B(1)vsC(2)	.76	NS
C Upgrade, Session I:						B(1)vsD(2)	1.05	NS
(1) Male	4.26	19	1.12	1.16	NS	C(2)vsD(2)	1.65	NS
(2) Female	4.59	29	.77					
D. Equivalent, Session I:								
(1) Male	4.80	5	.40					
(2) Female	4.86	29	.43					

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
26. A supervisor who is willing to help you with your off-the-job problems								
A. Entry - Male:								
(1) Session I	2.97	67	1.48	.99	NS	A(1)vsB(1)	.03	NS
(2) Session II	2.70	48	1.20			A(2)vsB(2)	.45	NS
B. Entry - Female:						A(1)vsC(1)	1.01	NS
(1) Session I	2.96	49	1.44	1.32	NS			
(2) Session II	2.58	56	1.38			B(1)vsC(2)	2.25	<.05
C. Upgrade, Session I:						B(1)vsD(2)	.93	NS
(1) Male	3.37	19	1.56	2.68	<.05	C(2)vsD(2)	1.28	NS
(2) Female	2.21	29	1.35					
D. Equivalent, Session I:								
(1) Male	3.20	5	1.47					
(2) Female	2.66	29	1.27					
27. Knowing your family is proud of the work you do								
A. Entry - Male:								
(1) Session I	4.04	67	1.23	1.98	<.05	A(1)vsB(1)	.38	NS
(2) Session II	3.54	47	1.21			A(2)vsB(2)	.05	NS
B. Entry - Female:						A(1)vsC(1)	.47	NS
(1) Session I	3.96	49	1.12	1.74	NS			
(2) Session II	3.56	57	1.18			B(1)vsC(2)	.02	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.52	NS
(1) Male	3.89	19	1.12	.21	NS	C(2)vsD(2)	1.38	NS
(2) Female	3.97	29	1.10					
D. Equivalent, Session I:								
(1) Male	4.80	5	.40					
(2) Female	3.55	29	1.13					
28. Knowing your friends respect you for the work you do								
A. Entry - Male:								
(1) Session I	4.10	67	1.07	2.62	<.01	A(1)vsB(1)	4.01	<.01
(2) Session II	3.54	48	1.17			A(2)vsB(2)	1.88	NS
B. Entry - Female:						A(1)vsC(1)	.73	NS
(1) Session I	3.22	49	1.27	.54	NS			
(2) Session II	3.08	57	1.26			B(1)vsC(2)	.39	NS
C. Upgrade, Session I:						B(1)vsD(2)	.92	NS
(1) Male	3.89	19	1.12	2.07	<.05	C(2)vsD(2)	.45	NS
(2) Female	3.10	29	1.35					
D. Equivalent, Session I:								
(1) Male	4.40	5	.80					
(2) Female	2.93	29	1.46					
29. Having a job that is interesting to your friends								
A. Entry - Male:								
(1) Session I	2.72	67	1.34	.97	NS	A(1)vsB(1)	2.80	<.01
(2) Session II	2.48	47	1.04			A(2)vsB(2)	.14	NS

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
B. Entry - Female:						A(1)vsC(1)	.23	NS
(1) Session I	2.04	49	1.18	1.76	NS			
(2) Session II	2.45	57	1.21			B(1)vsC(2)	.10	NS
C. Upgrade, Session I:						B(1)vsD(2)	.16	NS
(1) Male	2.63	19	1.49	1.44	NS	C(2)vsD(2)	.25	NS
(2) Female	2.07	29	1.14					
D. Equivalent, Session I:								
(1) Male	3.60	5	1.50					
(2) Female	2.00	29	.87					
30. Being something you can talk to your friends about after work								
A. Entry - Male:								
(1) Session I	3.06	67	1.38	1.27	NS	A(1)vsB(1)	2.57	<.05
(2) Session II	2.73	46	1.16			A(2)vsB(2)	.75	NS
B. Entry - Female:						A(1)vsC(1)	.43	NS
(1) Session I	2.43	49	1.16	.57	NS			
(2) Session II	2.56	57	1.18			B(1)vsC(2)	2.16	<.05
C. Upgrade, Session I:						B(1)vsD(2)	.46	NS
(1) Male	3.21	19	1.10	.36	NS	C(2)vsD(2)	2.38	<.05
(2) Female	3.07	29	1.39					
D. Equivalent, Session I:								
(1) Male	3.60	5	1.50					
(2) Female	2.31	29	.95					
31. Being able to learn new things that will help you get a better job later								
A. Entry - Male:								
(1) Session I	4.63	67	.75	.05	NS	A(1)vsB(1)	.47	NS
(2) Session II	4.68	47	.58			A(2)vsB(2)	.59	NS
B. Entry - Female:						A(1)vsC(1)	.96	NS
(1) Session I	4.69	49	.73	.44	NS			
(2) Session II	4.75	57	.65			B(1)vsC(2)	.61	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.11	NS
(1) Male	4.42	19	.99	1.57	NS	C(2)vsD(2)	.48	NS
(2) Female	4.79	29	.61					
D. Equivalent, Session I:								
(1) Male	4.80	5	.40					
(2) Female	4.86	29	.43					
32. Being able to learn to do something that is really hard								
A. Entry - Male:								
(1) Session I	3.85	67	1.30	1.05	NS	A(1)vsB(1)	.02	NS
(2) Session II	4.44	47	4.32			A(2)vsB(2)	.62	NS
B. Entry - Female:						A(1)vsC(1)	.94	NS
(1) Session I	3.86	49	1.09	1.01	NS			
(2) Session II	4.07	57	1.05			B(1)vsC(2)	2.10	<.05
C. Upgrade, Session I						B(1)vsD(2)	.15	NS
(1) Male	4.16	19	.99	.72	NS	C(2)vsD(2)	1.71	NS
(2) Female	4.34	29	.76					
D. Equivalent, Session I:								
(1) Male	3.40	5	1.50					
(2) Female	3.90	29	1.16					

Appendix F-1

RATINGS OF GOALS LIKERT-TYPE CONDITION

(Responses of Entry-Level Subjects Participating in Both Sessions)

Goals	Mean	N	Standard Deviation	t	p
1. Good pay					
A. Entry - Male:					
(1) Session I	4.50	32	.71	1.00	NS
(2) Session II	4.59	32	.61		
B. Entry - Female:					
(1) Session I	4.29	41	.92	.12	NS
(2) Session II	4.31	41	.96		
2. Good working conditions, like air conditioning					
A. Entry - Male:					
(1) Session I	3.68	32	1.28	1.66	NS
(2) Session II	3.37	32	1.26		
B. Entry - Female:					
(1) Session I	3.31	41	1.19	1.41	NS
(2) Session II	3.63	41	1.09		
3. A good vacation each year					
A. Entry - Male:					
(1) Session I	4.12	32	1.07	.92	NS
(2) Session II	3.96	32	.99		
B. Entry - Female:					
(1) Session I	3.22	41	1.23	2.03	<.05
(2) Session II	3.65	41	1.13		
4. A good retirement plan					
A. Entry - Male:					
(1) Session I	4.31	32	1.12	.57	NS
(2) Session II	4.21	32	1.00		
B. Entry - Female:					
(1) Session I	4.19	41	1.00	.52	NS
(2) Session II	4.09	41	1.11		
5. Being able to work close to home					
A. Entry - Male:					
(1) Session I	3.56	32	1.39	.75	NS
(2) Session II	3.68	32	1.28		
B. Entry - Female:					
(1) Session I	3.46	41	1.24	.48	NS
(2) Session II	3.36	41	1.35		

Goals	Mean	N	Standard Deviation	t	p
6. A good hospitalization plan					
A. Entry - Male:					
(1) Session I	4.31	32	.99	1.42	NS
(2) Session II	4.03	32	1.23		
B. Entry - Female:					
(1) Session I	3.85	41	1.21	1.00	NS
(2) Session II	4.02	41	1.27		
7. A plan to pay doctor's bills					
A. Entry - Male:					
(1) Session I	4.06	32	1.01	.75	NS
(2) Session II	4.21	32	1.09		
B. Entry - Female:					
(1) Session I	3.58	41	1.22	1.46	NS
(2) Session II	3.92	41	1.19		
8. Being able to keep the job as long as you want					
A. Entry - Male:					
(1) Session I	4.37	32	.90	.47	NS
(2) Session II	4.28	32	.85		
B. Entry - Female:					
(1) Session I	4.56	41	.80	.17	NS
(2) Session II	4.58	41	.77		
9. Being able to take pride in what you do					
A. Entry - Male:					
(1) Session I	4.56	32	.75	3.57	<.01
(2) Session II	4.03	32	1.09		
B. Entry - Female:					
(1) Session I	4.43	41	1.00	1.53	NS
(2) Session II	4.09	41	1.04		
10. Being able to do the type work you always wanted to do					
A. Entry - Male:					
(1) Session I	4.50	32	.95	.16	NS
(2) Session II	4.46	32	.84		
B. Entry - Female:					
(1) Session I	4.48	41	.81	.15	NS
(2) Session II	4.51	41	.81		

Goals	Mean	N	Standard Deviation	t	p
11. Knowing there is a good chance of being promoted					
A. Entry - Male:					
(1) Session I	4.68	32	.69	2.18	<.05
(2) Session II	4.40	32	.83		
B. Entry - Female:					
(1) Session I	4.68	41	.65	1.86	NS
(2) Session II	4.41	41	.86		
12. Feeling proud of your job					
A. Entry - Male:					
(1) Session I	4.25	32	1.01	1.77	NS
(2) Session II	3.93	32	1.16		
B. Entry - Female:					
(1) Session I	4.65	41	.69	1.12	NS
(2) Session II	4.48	41	.92		
13. A lot of time off without losing pay					
A. Entry - Male:					
(1) Session I	2.53	32	1.29	.54	NS
(2) Session II	2.40	32	1.01		
B. Entry - Female:					
(1) Session I	2.85	41	1.40	1.09	NS
(2) Session II	2.56	41	1.24		
14. Being able to buy a lot of new things					
A. Entry - Male:					
(1) Session I	2.84	32	1.13	.32	NS
(2) Session II	2.90	32	.81		
B. Entry - Female:					
(1) Session I	2.56	41	1.20	.90	NS
(2) Session II	2.73	41	1.09		
15. Being able to buy things I have always wanted					
A. Entry - Male:					
(1) Session I	3.15	32	1.27	1.20	NS
(2) Session II	3.43	32	.84		
B. Entry - Female:					
(1) Session I	3.24	41	1.37	.84	NS
(2) Session II	3.41	41	1.16		

Goals	Mean	N	Standard Deviation	t	p
16. Being able to buy things I need					
A. Entry - Male:					
(1) Session I	4.18	32	1.14	.89	NS
(2) Session II	4.03	32	1.06		
B. Entry - Female:					
(1) Session I	3.75	41	1.22	.72	NS
(2) Session II	3.90	41	1.20		
17. Being able to work with people who think my work is good					
A. Entry - Male:					
(1) Session I	3.96	32	1.03	1.09	NS
(2) Session II	3.75	32	1.07		
B. Entry - Female:					
(1) Session I	3.85	41	1.08	.11	NS
(2) Session II	3.82	41	1.04		
18. Being able to work with people who like me					
A. Entry - Male:					
(1) Session I	3.75	32	1.13	.44	NS
(2) Session II	3.65	32	1.23		
B. Entry - Female:					
(1) Session I	3.61	41	1.26	2.15	<.05
(2) Session II	3.22	41	1.25		
19. Being able to work with people who are friendly					
A. Entry - Male:					
(1) Session I	3.96	32	1.09	1.61	NS
(2) Session II	4.31	32	.85		
B. Entry - Female:					
(1) Session I	4.34	41	.96	1.97	NS
(2) Session II	4.00	41	1.00		
20. Being able to talk and have fun with the other people working there					
A. Entry - Male:					
(1) Session I	3.37	32	1.45	.27	NS
(2) Session II	3.31	32	1.14		
B. Entry - Female:					
(1) Session I	3.22	41	1.37	1.85	NS
(2) Session II	2.85	41	1.13		

Goals	Mean	N	Standard Deviation	t	p
21. Being able to work with people who think as much of me as my friends do					
A. Entry - Male:					
(1) Session I	3.71	32	1.05	2.08	<.05
(2) Session II	3.31	32	1.25		
B. Entry - Female:					
(1) Session I	3.31	41	1.29	2.71	<.05
(2) Session II	2.68	41	1.25		
22. A supervisor who is friendly					
A. Entry - Male:					
(1) Session I	3.90	32	1.25	1.00	NS
(2) Session II	3.71	32	1.17		
B. Entry - Female:					
(1) Session I	4.04	41	1.09	1.02	NS
(2) Session II	3.80	41	1.22		
23. A supervisor who treats everyone fairly					
A. Entry - Male:					
(1) Session I	4.40	32	1.01	1.23	NS
(2) Session II	4.21	32	.97		
B. Entry - Female:					
(1) Session I	4.51	41	.81	1.49	NS
(2) Session II	4.26	41	.94		
24. A supervisor who tells you when you have done a good job on something					
A. Entry - Male:					
(1) Session I	3.87	32	1.07	.54	NS
(2) Session II	3.25	32	1.08		
B. Entry - Female:					
(1) Session I	3.97	41	.96	.47	NS
(2) Session II	3.87	41	1.02		
25. A supervisor who helps when you need help					
A. Entry - Male:					
(1) Session I	4.46	32	.98	.20	NS
(2) Session II	4.50	32	.76		
B. Entry - Female:					
(1) Session I	4.75	41	.62	1.38	NS
(2) Session II	4.56	41	.80		

Goals	Mean	N	Standard Deviation	t	p
26. A supervisor who is willing to help you with your off-the-job problems					
A. Entry - Male:					
(1) Session I	2.81	32	1.14	1.04	NS
(2) Session II	2.59	32	1.18		
B. Entry - Female:					
(1) Session I	3.04	41	1.44	2.58	<.05
(2) Session II	2.46	41	1.26		
27. Knowing your family is proud of the work you do					
A. Entry - Male:					
(1) Session I	3.84	32	1.32	1.40	NS
(2) Session II	3.50	32	1.24		
B. Entry - Female:					
(1) Session I	3.85	41	1.17	1.75	NS
(2) Session II	3.48	41	1.07		
28. Knowing your friends respect you for the work you do					
A. Entry - Male:					
(1) Session I	3.93	32	1.07	2.43	<.05
(2) Session II	3.31	32	1.03		
B. Entry - Female:					
(1) Session I	3.12	41	1.26	1.12	NS
(2) Session II	2.90	41	1.28		
29. Having a job that is interesting to your friends					
A. Entry - Male:					
(1) Session I	2.37	32	1.10	.86	NS
(2) Session II	2.53	32	.91		
B. Entry - Female:					
(1) Session I	2.04	41	1.13	1.50	NS
(2) Session II	2.36	41	1.06		
30. Being something you can talk to your friends about after work					
A. Entry - Male:					
(1) Session I	2.93	32	1.31	.62	NS
(2) Session II	2.78	32	1.23		
B. Entry - Female:					
(1) Session I	2.36	41	1.11	1.08	NS
(2) Session II	2.58	41	1.18		

Goals	Mean	N	Standard Deviation	t	p
31. Being able to learn new things that will help you get a better job later					
A. Entry - Male:					
(1) Session I	4.68	32	.69	.22	NS
(2) Session II	4.65	32	.60		
B. Entry - Female:					
(1) Session I	4.73	41	.74	.14	NS
(2) Session II	4.70	41	.75		
32. Being able to learn to do something that is really hard					
A. Entry - Male:					
(1) Session I	3.84	32	1.19	.43	NS
(2) Session II	3.75	32	1.01		
B. Entry - Female:					
(1) Session I	3.80	41	1.00	1.56	NS
(2) Session II	4.07	41	1.01		

Appendix G

RATINGS OF GOALS: FORCED-CHOICE CONDITION

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
1. Good pay								
A. Entry - Male:								
(1) Session I	2.07	71	1.21	.00	NS	A(1)vsB(1)	1.04	NS
(2) Session II	2.07	41	1.37			A(2)vsB(2)	.31	NS
B. Entry - Female:						B(1)vsC(2)	2.12	<.05
(1) Session I	1.86	65	1.07	1.59	NS			
(2) Session II	2.14	64	.93			B(1)vsD(2)	3.49	<.001
C. Upgrade, Session I:						C(2)vsD(2)	1.09	NS
(1) Male	1.70	8	.88					
(2) Female	2.38	28	1.02					
D. Equivalent, Session I:								
(1) Male	2.43	6	1.51					
(2) Female	2.66	30	.09					
2. Good working conditions, like air conditioning								
A. Entry - Male:								
(1) Session I	1.16	71	1.56	.09	NS	A(1)vsB(1)	.50	NS
(2) Session II	1.13	41	1.51			A(2)vsB(2)	.00	NS
B. Entry - Female:						B(1)vsC(2)	.08	NS
(1) Session I	1.31	65	1.76	.60	NS			
(2) Session II	1.13	64	1.52			B(1)vsD(2)	.82	NS
C. Upgrade, Session I:						C(2)vsD(2)	.82	NS
(1) Male	.71	7	1.13					
(2) Female	1.34	28	1.56					
D. Equivalent, Session I:								
(1) Male	1.25	6	1.91					
(2) Female	1.00	30	1.53					
3. A good vacation each year								
A. Entry - Male:								
(1) Session I	2.15	71	2.44	.45	NS	A(1)vsB(1)	2.58	<.02
(2) Session II	2.38	38	2.43			A(2)vsB(2)	.53	NS
B. Entry - Female:						B(1)vsC(2)	1.79	NS
(1) Session I	3.24	65	2.38	2.62	<.01			
(2) Session II	2.10	64	2.46			B(1)vsD(2)	1.06	NS
C. Upgrade, Session I:						C(2)vsD(2)	.62	NS
(1) Male	3.31	7	2.01					
(2) Female	2.26	28	2.41					
D. Equivalent, Session I:								
(1) Male	1.66	6	2.36					
(2) Female	2.67	30	2.49					
4. A good retirement plan								
A. Entry - Male:								
(1) Session I	3.10	71	1.49	.12	NS	A(1)vsB(1)	.56	NS
(2) Session II	3.14	41	1.37			A(2)vsB(2)	.18	NS
B. Entry - Female:						B(1)vsC(2)	1.68	NS
(1) Session I	2.97	65	1.22	.96	NS			
(2) Session II	3.19	64	1.41			B(1)vsD(2)	1.84	NS

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:						C(2)vsD(2)	.08	NS
(1) Male	2.64	8	.96					
(2) Female	2.47	28	1.51					
D. Equivalent, Session I:								
(1) Male	3.55	6	1.83					
(2) Female	2.43	30	1.51					
5. Being able to work close to home								
A. Entry - Male:								
(1) Session I	2.43	71	1.80	1.18	NS	A(1)vsB(1)	.63	NS
(2) Session II	2.00	41	1.84			A(2)vsB(2)	.42	NS
B. Entry - Female:						B(1)vsC(2)	.39	NS
(1) Session I	2.25	65	1.68	1.33	NS			
(2) Session II	1.85	64	1.68			B(1)vsD(2)	1.58	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.03	NS
(1) Male	3.06	7	1.42					
(2) Female	2.10	28	1.59					
D. Equivalent, Session I:								
(1) Male	3.33	6	1.35					
(2) Female	1.68	29	1.45					
6. A good hospitalization plan								
A. Entry - Male:								
(1) Session I	3.53	71	1.33	.48	NS	A(1)vsB(1)	2.56	<.02
(2) Session II	3.40	41	1.46			A(2)vsB(2)	.58	NS
B. Entry - Female:						B(1)vsC(2)	1.05	NS
(1) Session I	2.94	65	1.32	2.71	<.01			
(2) Session II	3.55	64	1.23			B(1)vsD(2)	2.06	<.05
C. Upgrade, Session I:						C(2)vsD(2)	.72	[illegible]
(1) Male	3.11	8	.98					
(2) Female	3.28	28	1.50					
D. Equivalent, Session I:								
(1) Male	3.32	6	1.67					
(2) Female	3.54	30	1.27					
7. A plan to pay doctor's bills								
A. Entry - Male:								
(1) Session I	1.97	71	1.55	.52	NS	A(1)vsB(1)	2.08	<.05
(2) Session II	2.12	41	1.25			A(2)vsB(2)	1.31	NS
B. Entry - Female:						B(1)vsC(2)	.52	NS
(1) Session I	1.46	65	1.24	.87	NS			
(2) Session II	1.65	64	1.27			B(1)vsD(2)	.27	NS
C. Upgrade, Session I:						C(2)vsD(2)	.24	NS
(1) Male	1.13	8	1.31					
(2) Female	1.61	28	1.18					
D. Equivalent, Session I:								
(1) Male	2.17	6	1.67					
(2) Female	1.53	30	1.12					

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
8. Being able to keep the job as long as you want								
A. Entry - Male:								
(1) Session I	1.94	71	1.05	1.84	NS	A(1)vsB(1)	.01	NS
(2) Session II	2.33	41	1.16			A(2)vsB(2)	1.61	NS
B. Entry - Female:						B(1)vsC(2)	.54	NS
(1) Session I	1.93	65	1.26	.30	NS			
(2) Session II	1.99	64	.99			B(1)vsD(2)	1.30	NS
C. Upgrade, Session I:						C(2)vsD(2)	.74	NS
(1) Male	1.31	7	.81					
(2) Female	1.78	28	1.01					
D. Equivalent, Session I:								
(1) Male	1.43	6	1.11					
(2) Female	1.60	30	.81					
9. Being able to take pride in what you do								
A. Entry - Male:								
(1) Session I	4.04	71	1.22	3.50	<.01	A(1)vsB(1)	.78	NS
(2) Session II	3.18	41	1.27			A(2)vsB(2)	3.58	<.01
B. Entry - Female:						B(1)vsC(2)	1.89	NS
(1) Session I	3.87	65	1.30	.74	NS			
(2) Session II	4.02	64	1.09			B(1)vsD(2)	.58	NS
C. Upgrade, Session I:						C(2)vsD(2)	2.55	<.05
(1) Male	4.06	8	1.04					
(2) Female	4.38	28	.84					
D. Equivalent, Session I:								
(1) Male	3.37	6	1.54					
(2) Female	3.71	30	1.10					
10. Being able to do the type work you always wanted to do								
A. Entry - Male:								
(1) Session I	3.56	71	1.55	1.02	NS	A(1)vsB(1)	.07	NS
(2) Session II	3.23	41	1.67			A(2)vsB(2)	.51	NS
B. Entry - Female:						B(1)vsC(2)	.70	NS
(1) Session I	3.58	65	1.45	.68	NS			
(2) Session II	3.39	64	1.55			B(1)vsD(2)	.56	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.11	NS
(1) Male	2.92	6	1.72					
(2) Female	3.33	28	1.49					
D. Equivalent, Session I:								
(1) Male	2.50	6	2.04					
(2) Female	3.75	30	1.25					
11. Knowing there is a good chance of being promoted								
A. Entry - Male:								
(1) Session I	3.32	71	1.12	1.65	NS	A(1)vsB(1)	1.06	NS
(2) Session II	3.68	41	1.04			A(2)vsB(2)	2.04	<.05
B. Entry - Female:						B(1)vsC(2)	.52	NS
(1) Session I	3.51	65	.84	1.50	NS			
(2) Session II	3.26	64	.98			B(1)vsD(2)	.37	NS

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:						C(2)vsD(2)	.71	NS
(1) Male	3.88	8	.93					
(2) Female	3.61	28	.82					
D. Equivalent, Session I:								
(1) Male	3.83	6	1.07					
(2) Female	3.43	30	.99					
12. Feeling proud of your job								
A. Entry - Male:								
(1) Session I	3.15	71	1.39	.38	NS	A(1)vsB(1)	1.06	NS
(2) Session II	3.04	41	1.37			A(2)vsB(2)	1.88	NS
B. Entry - Female:								
(1) Session I	3.39	65	1.26	.61	NS	B(1)vsC(2)	.96	NS
(2) Session II	3.52	64	1.18			B(1)vsD(2)	3.11	<.05
C. Upgrade, Session I:						C(2)vsD(2)	1.68	NS
(1) Male	3.03	8	1.26					
(2) Female	3.11	28	1.35					
D. Equivalent, Session I:								
(1) Male	2.10	6	1.55					
(2) Female	2.47	30	1.47					
13. A lot of time off without losing pay								
A. Entry - Male:								
(1) Session I	.58	71	1.58	.74	NS	A(1)vsB(1)	.16	NS
(2) Session II	.82	41	1.83			A(2)vsB(2)	.08	NS
B. Entry - Female:								
(1) Session I	.54	65	1.55	1.04	NS	B(1)vsC(2)	.53	NS
(2) Session II	.85	64	1.87			B(1)vsD(2)	.48	NS
C. Upgrade, Session I:						C(2)vsD(2)	.85	NS
(1) Male	.83	6	1.86					
(2) Female	.36	28	1.28					
D. Equivalent, Session I:								
(1) Male	.00	6	.00					
(2) Female	.71	28	1.75					
14. Being able to buy a lot of new things								
A. Entry - Male:								
(1) Session I	.88	71	1.33	.28	NS	A(1)vsB(1)	2.67	<.01
(2) Session II	.96	41	1.63			A(2)vsB(2)	1.42	NS
B. Entry - Female:								
(1) Session I	1.62	65	1.83	.55	NS	B(1)vsC(2)	.45	NS
(2) Session II	1.44	64	1.70			B(1)vsD(2)	2.12	<.05
C. Upgrade, Session I:						C(2)vsD(2)	1.53	NS
(1) Male	1.56	8	1.74					
(2) Female	1.43	28	1.69					
D. Equivalent, Session I:								
(1) Male	1.33	6	1.86					
(2) Female	.83	30	1.18					

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
15. Being able to buy things I have always wanted								
A. Entry - Male:								
(1) Session I	1.02	71	1.48	.30	NS	A(1)vsB(1)	2.18	<.05
(2) Session II	1.10	41	1.47			A(2)vsB(2)	1.73	NS
B. Entry - Female:						B(1)vsC(2)	1.20	NS
(1) Session I	1.62	65	1.67	.19	NS			
(2) Session II	1.67	64	1.71			B(1)vsD(2)	.83	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.87	NS
(1) Male	2.50	7	1.34					
(2) Female	1.18	28	1.40					
D. Equivalent, Session I:								
(1) Male	.65	6	.89					
(2) Female	1.92	30	1.54					
16. Being able to buy things I need								
A. Entry - Male:								
(1) Session I	2.33	71	2.48	1.32	NS	A(1)vsB(1)	2.52	<.02
(2) Session II	2.97	41	2.42			A(2)vsB(2)	.50	NS
B. Entry - Female:						B(1)vsC(2)	.01	NS
(1) Session I	3.38	65	2.34	.38	NS			
(2) Session II	3.21	64	2.38			B(1)vsD(2)	1.23	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.49	NS
(1) Male	2.93	7	2.40					
(2) Female	3.39	28	2.34					
D. Equivalent, Session I:								
(1) Male	.83	6	1.86					
(2) Female	4.00	30	2.00					
17. Being able to work with people who think my work is good								
A. Entry - Male:								
(1) Session I	2.40	71	1.57	.59	NS	A(1)vsB(1)	.59	NS
(2) Session II	2.59	41	1.67			A(2)vsB(2)	.44	NS
B. Entry - Female:						B(1)vsC(2)	.06	NS
(1) Session I	2.56	65	1.39	.42	NS			
(2) Session II	2.45	64	1.51			B(1)vsD(2)	1.02	NS
C. Upgrade, Session I:						C(2)vsD(2)	.69	NS
(1) Male	2.26	8	1.15					
(2) Female	2.54	28	1.12					
D. Equivalent, Session I:								
(1) Male	2.48	6	1.25					
(2) Female	2.88	29	1.36					
18. Being able to work with people who like me								
A. Entry - Male:								
(1) Session I	2.33	71	1.61	.20	NS	A(1)vsB(1)	1.01	NS
(2) Session II	2.39	41	1.75			A(2)vsB(2)	.94	NS
B. Entry - Female:						B(1)vsC(2)	.70	NS
(1) Session I	2.63	65	1.79	1.83	NS			
(2) Session II	2.08	64	1.54			B(1)vsD(2)	.23	NS

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:						C(2)vsD(2)	.46	NS
(1) Male	3.51	8	1.33					
(2) Female	2.90	28	1.52					
D. Equivalent, Session I:								
(1) Male	1.95	6	1.77					
(2) Female	2.71	30	1.57					
19. Being able to work with people who are friendly								
A. Entry - Male:								
(1) Session I	3.95	71	1.42	.18	NS	A(1)vsB(1)	.28	NS
(2) Session II	3.90	41	1.46			A(2)vsB(2)	.68	NS
B. Entry - Female:								
(1) Session I	3.88	65	1.46	.68	NS	B(1)vsC(2)	1.30	NS
(2) Session II	3.71	64	1.32			B(1)vsD(2)	.92	NS
C. Upgrade, Session I:						C(2)vsD(2)	.40	NS
(1) Male	4.06	8	1.21					
(2) Female	4.29	28	1.14					
D. Equivalent, Session I:								
(1) Male	5.00	6	.00					
(2) Female	4.17	30	1.18					
20. Being able to talk and have fun with the other people working there								
A. Entry - Male:								
(1) Session I	1.23	71	2.13	1.33	NS	A(1)vsB(1)	.44	NS
(2) Session II	.70	41	1.71			A(2)vsB(2)	.01	NS
B. Entry - Female:								
(1) Session I	1.40	65	2.23	1.96	NS	B(1)vsC(2)	2.28	<.05
(2) Session II	.70	64	1.73			B(1)vsD(2)	.66	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.47	NS
(1) Male	.00	6	.00					
(2) Female	.37	27	1.30					
D. Equivalent, Session I:								
(1) Male	.00	6	.00					
(2) Female	1.07	28	2.05					
21. Being able to work with people who think as much of me as my friends do								
A. Entry - Male:								
(1) Session I	1.90	71	1.38	.18	NS	A(1)vsB(1)	.40	NS
(2) Session II	1.85	41	1.13			A(2)vsB(2)	1.63	NS
B. Entry - Female:								
(1) Session I	1.81	65	1.29	1.60	NS	B(1)vsC(2)	.30	NS
(2) Session II	1.43	64	1.33			B(1)vsD(2)	1.22	NS
C. Upgrade, Session I:						C(2)vsD(2)	.70	NS
(1) Male	2.63	8	.99					
(2) Female	1.71	28	1.44					
D. Equivalent, Session I:								
(1) Male	2.17	6	1.34					
(2) Female	1.47	30	1.18					

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
22. A supervisor who is friendly								
A. Entry - Male:								
(1) Session I	3.07	71	1.15	3.03	<.01	A(1)vsB(1)	.70	NS
(2) Session II	2.34	41	1.31			A(2)vsB(2)	.84	NS
B. Entry - Female:						B(1)vsC(2)	.14	NS
(1) Session I	2.92	65	1.27	1.75	NS	B(1)vsD(2)	.39	NS
(2) Session II	2.54	64	1.11			C(2)vsD(2)	.21	NS
C. Upgrade, Session I:								
(1) Male	3.13	8	.93					
(2) Female	2.86	28	1.12					
D. Equivalent, Session I:								
(1) Male	2.83	6	1.07					
(2) Female	3.03	30	1.25					
23. A supervisor who treats everyone fairly								
A. Entry - Male:								
(1) Session I	2.11	71	1.03	6.29	<.01	A(1)vsB(1)	2.54	<.02
(2) Session II	3.44	41	1.11			A(2)vsB(2)	2.61	<.05
B. Entry - Female:						B(1)vsC(2)	1.48	NS
(1) Session I	1.61	65	1.23	4.89	<.01	B(1)vsD(2)	1.46	NS
(2) Session II	2.75	64	1.40			C(2)vsD(2)	.01	NS
C. Upgrade, Session I:								
(1) Male	1.66	8	1.17					
(2) Female	2.01	28	1.02					
D. Equivalent, Session I:								
(1) Male	2.77	6	.75					
(2) Female	2.01	29	1.17					
24. A supervisor who tells you when you have done a good job on something								
A. Entry - Male:								
(1) Session I	2.32	71	1.53	1.39	NS	A(1)vsB(1)	2.16	<.05
(2) Session II	2.75	41	1.63			A(2)vsB(2)	.18	NS
B. Entry - Female:						B(1)vsC(2)	.93	NS
(1) Session I	2.92	65	1.67	.77	NS	B(1)vsD(2)	.02	NS
(2) Session II	2.69	64	1.61			C(2)vsD(2)	.87	NS
C. Upgrade, Session I:								
(1) Male	3.21	7	1.13					
(2) Female	2.58	28	1.25					
D. Equivalent, Session I:								
(1) Male	1.25	6	1.25					
(2) Female	2.93	29	1.62					
25. A supervisor who helps when you need help								
A. Entry - Male:								
(1) Session I	3.47	71	2.29	.15	NS	A(1)vsB(1)	2.38	<.02
(2) Session II	3.53	41	2.27			A(2)vsB(2)	1.51	NS
B. Entry - Female:						B(1)vsC(2)	.05	NS
(1) Session I	4.31	65	1.73	.48	NS	B(1)vsD(2)	.96	NS
(2) Session II	4.15	64	1.85					

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:						C(2)vsD(2)	1.07	NS
(1) Male	2.75	8	2.28					
(2) Female	4.28	28	1.74					
D. Equivalent, Session I:								
(1) Male	4.17	6	1.86					
(2) Female	4.66	29	1.27					
26. A supervisor who is willing to help you with your off-the-job problems								
A. Entry - Male:								
(1) Session I	2.80	71	1.57	1.12	NS	A(1)vsB(1)	.58	NS
(2) Session II	2.44	41	1.63			A(2)vsB(2)	1.13	NS
B. Entry - Female:						B(1)vsC(2)	1.44	NS
(1) Session I	2.94	65	1.33	.72	NS			
(2) Session II	2.77	64	1.29			B(1)vsD(2)	.64	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.68	NS
(1) Male	4.05	8	1.04					
(2) Female	2.51	28	1.30					
D. Equivalent, Session I:								
(1) Male	3.15	6	1.58					
(2) Female	3.14	30	1.50					
27. Knowing your family is proud of the work you do								
A. Entry - Male:								
(1) Session I	3.85	71	1.60	.71		A(1)vsB(1)	.52	NS
(2) Session II	3.60	41	1.74			A(2)vsB(2)	.76	NS
B. Entry - Female:						B(1)vsC(2)	.46	NS
(1) Session I	3.98	65	1.37	.62				
(2) Session II	3.83	64	1.24			B(1)vsD(2)	.46	NS
C. Upgrade, Session I:						C(2)vsD(2)	.01	NS
(1) Male	4.38	8	1.08					
(2) Female	3.54	28	1.25					
D. Equivalent, Session I:								
(1) Male	4.58	6	.93					
(2) Female	3.83	30	1.55					
28. Knowing your friends respect you for the work you do								
A. Entry - Male:								
(1) Session I	1.87	71	2.40	1.05	NS	A(1)vsB(1)	2.72	<.01
(2) Session II	1.37	40	2.23			A(2)vsB(2)	1.57	NS
B. Entry - Female:						B(1)vsC(2)	.89	NS
(1) Session I	.85	65	1.87	.31	NS			
(2) Session II	.75	64	1.75			B(1)vsD(2)	1.24	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.84	NS
(1) Male	2.50	6	2.50					
(2) Female	1.25	28	2.17					
D. Equivalent, Session I:								
(1) Male	.83	6	1.86					
(2) Female	.36	23	1.28					

Goals	Mean	N	S.D.	t	p	Additional Comparisons	t	p
29. Having a job that is interesting to your friends								
A. Entry - Male:								
(1) Session I	.63	71	1.16	.53	NS	A(1)vsB(1)	.28	NS
(2) Session II	.75	41	1.25			A(2)vsB(2)	1.27	NS
B. Entry - Female:						B(1)vsC(2)	1.29	NS
(1) Session I	.58	65	1.14	.67	NS			
(2) Session II	.43	64	1.22			B(1)vsD(2)	.43	NS
C. Upgrade, Session I:						C(2)vsD(2)	.61	NS
(1) Male	.83	6	1.18					
(2) Female	.38	26	.79					
D. Equivalent, Session I:								
(1) Male	.00	6	.00					
(2) Female	.46	27	1.19					
30. Being something you can talk to your friends about after work								
A. Entry - Male:								
(1) Session I	.98	71	1.98	2.03	<.05	A(1)vsB(1)	.99	NS
(2) Session II	.29	41	1.10			A(2)vsB(2)	1.85	NS
B. Entry - Female:						B(1)vsC(2)	2.20	<.05
(1) Session I	1.35	65	2.20	1.21	NS			
(2) Session II	.90	64	1.90			B(1)vsD(2)	.47	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.42	NS
(1) Male	1.67	6	2.36					
(2) Female	.40	25	1.33					
D. Equivalent, Session I:								
(1) Male	.83	6	1.86					
(2) Female	1.11	27	2.08					
31. Being able to learn new things that will help you get a better job later								
A. Entry - Male:								
(1) Session I	3.94	71	1.60	1.81	NS	A(1)vsB(1)	.77	NS
(2) Session II	3.32	41	1.86			A(2)vsB(2)	2.40	<.05
B. Entry - Female:						B(1)vsC(2)	.30	NS
(1) Session I	3.73	65	1.59	1.41	NS			
(2) Session II	4.10	64	1.41			B(1)vsD(2)	1.86	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.37	NS
(1) Male	4.06	8	1.21					
(2) Female	3.84	28	1.56					
D. Equivalent, Session I:								
(1) Male	2.92	6	1.72					
(2) Female	4.33	30	1.11					
32. Being able to learn to do something that is really hard								
A. Entry - Male:								
(1) Session I	3.77	71	1.87	1.82	NS	A(1)vsB(1)	.47	NS
(2) Session II	4.36	41	1.20			A(2)vsB(2)	1.19	NS

Goals	Mean	N	S.D.	t	p
B. Entry - Female:					
(1) Session I	3.62	65	1.86	1.37	NS
(2) Session II	4.03	64	1.49		
C. Upgrade, Session I:					
(1) Male	3.57	7	1.24		
(2) Female	4.29	28	1.31		
D. Equivalent, Session I:					
(1) Male	3.75	6	1.91		
(2) Female	3.83	30	1.80		

Additional Comparisons	t	p
B(1)vsC(2)	1.71	NS
B(1)vsD(2)	.53	NS
C(2)vsD(2)	1.07	NS

Appendix H

RATINGS OF VALUE CATEGORIES: LIKERT-TYPE CONDITION

Value Category	Mean	N	S.D.	t	p	Additional Comparisons	t	p
I. Extrinsic Benefits								
A. Entry - Male:								
(1) Session I	4.25	67	.66	1.45	NS	A(1)vsB(1)	3.11	<.01
(2) Session II	4.07	49	.62			A(2)vsB(2)	.06	NS
B. Entry - Female:						A(1)vsC(1)	.76	NS
(1) Session I	3.85	49	.69	1.59	NS			
(2) Session II	4.06	57	.72			B(1)vsC(2)	.51	NS
C. Upgrade, Session I:						B(1)vsD(2)	.79	NS
(1) Male	4.14	19	.56	1.10	NS	C(2)vsD(2)	.51	NS
(2) Female	3.93	29	.65					
D. Equivalent, Session I:								
(1) Male	4.39	5	.47					
(2) Female	3.97	29	.54					
II. Intrinsic Benefits								
A. Entry - Male:								
(1) Session I	4.56	67	.60	1.72	NS	A(1)vsB(1)	.22	NS
(2) Session II	4.36	49	.65			A(2)vsB(2)	.39	NS
B. Entry - Female:						A(1)vsC(1)	.98	NS
(1) Session I	4.54	49	.59	1.13	NS			
(2) Session II	4.41	57	.55			B(1)vsC(2)	.54	NS
C. Upgrade, Session I:						B(1)vsD(2)	.70	NS
(1) Male	4.71	19	.47	1.49	NS	C(2)vsD(2)	.54	NS
(2) Female	4.46	29	.61					
D. Equivalent, Session I:								
(1) Male	3.79	5	.85					
(2) Female	4.43	29	.68					
III. Gratification Demands								
A. Entry - Male:								
(1) Session I	3.59	67	.78	1.83	NS	A(1)vsB(1)	.97	NS
(2) Session II	3.34	49	.61			A(2)vsB(2)	.64	NS
B. Entry - Female:						A(1)vsC(1)	.46	NS
(1) Session I	3.45	49	.79	.07	NS			
(2) Session II	3.43	57	.77			B(1)vsC(2)	.32	NS
C. Upgrade, Session I:						B(1)vsD(2)	.58	NS
(1) Male	3.69	19	.75	1.34	NS	C(2)vsD(2)	.32	NS
(2) Female	3.39	29	.73					
D. Equivalent, Session I:								
(1) Male	3.58	5	.77					
(2) Female	3.56	29	.84					
IV. Interpersonal Relations with Co-Workers								
A. Entry - Male:								
(1) Session I	3.98	67	.85	1.76	NS	A(1)vsB(1)	2.08	<.05
(2) Session II	3.69	48	.87			A(2)vsB(2)	1.71	NS
B. Entry - Female:						A(1)vsC(1)	.04	NS
(1) Session I	3.64	49	.90	1.42	NS			
(2) Session II	3.41	57	.82			B(1)vsC(2)	.66	NS

Value Category	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:						B(1)vsD(2)	.86	NS
(1) Male	3.97	19	.79	.96	NS			
(2) Female	3.77	29	.65			C(2)vsD(2)	.66	NS
D. Equivalent, Session I:								
(1) Male	4.28	5	.78					
(2) Female	3.46	29	.84					
V. Interpersonal Relations with Supervisor								
A. Entry - Male:								
(1) Session I	3.98	67	.74	1.25	NS	A(1)vsB(1)	.83	NS
(2) Session II	3.81	48	.67			A(2)vsB(2)	.32	NS
B. Entry - Female:						A(1)vsC(1)	.08	NS
(1) Session I	4.09	49	.61	1.97	NS			
(2) Session II	3.85	57	.61			B(1)vsC(2)	.69	NS
C. Upgrade, Session I:						B(1)vsD(2)	.25	NS
(1) Male	4.00	19	.89	.02	NS			
(2) Female	4.00	29	.56			C(2)vsD(2)	.69	NS
D. Equivalent, Session I:								
(1) Male	4.32	5	.41					
(2) Female	4.06	29	.57					
VI. Interpersonal Relations with Family								
A. Entry - Male:								
(1) Session I	4.04	67	1.22	1.98	<.05	A(1)vsB(1)	.38	NS
(2) Session II	3.54	47	1.21			A(2)vsB(2)	.05	NS
B. Entry - Female:						A(1)vsC(1)	.89	NS
(1) Session I	3.95	49	1.12	1.74	NS			
(2) Session II	3.56	57	1.18			B(1)vsC(2)	.02	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.52	NS
(1) Male	4.31	19	.86	1.14	NS			
(2) Female	3.96	29	1.09			C(2)vsD(2)	.02	NS
D. Equivalent, Session I:								
(1) Male	4.80	5	.40					
(2) Female	3.55	29	1.13					
VII. Interpersonal Relations with Friends								
A. Entry - Male:								
(1) Session I	3.30	67	.95	2.13	<.05	A(1)vsB(1)	4.24	<.01
(2) Session II	2.92	48	.92			A(2)vsB(2)	1.24	NS
B. Entry - Female:						A(1)vsC(1)	.47	NS
(1) Session I	2.57	49	.84	.68	NS			
(2) Session II	2.69	57	.93			B(1)vsC(2)	.79	NS
C. Upgrade, Session I:						B(1)vsD(2)	.80	NS
(1) Male	3.19	19	.89	1.57	NS			
(2) Female	2.74	29	.96			C(2)vsD(2)	.79	NS
D. Equivalent, Session I:								
(1) Male	4.04	5	.70					
(2) Female	2.41	29	.88					

Value Category	Mean	N	S.D.	t	p	Additional Comparisons	t	p
VIII. Developmental Needs								
A. Entry - Male:								
(1) Session I	4.23	67	.85	.03	NS	A(1)vsB(1)	.24	NS
(2) Session II	4.24	47	.62			A(2)vsB(2)	1.31	NS
B. Entry - Female:						A(1)vsC(1)	.23	NS
(1) Session I	4.27	49	.73	1.00	NS			
(2) Session II	4.41	57	.64			B(1)vsC(2)	1.86	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.61	NS
(1) Male	4.28	19	.74	1.49	NS	C(2)vsD(2)	1.86	NS
(2) Female	4.56	29	.52					
D. Equivalent, Session I:								
(1) Male	4.10	5	.91					
(2) Female	4.37	29	.65					

Appendix I

RATINGS OF VALUE CATEGORIES: FORCED-CHOICE CONDITION

Value Category	Mean	N	S.D.	t	p	Additional Comparisons	t	p
I. Extrinsic Benefits								
A. Entry - Male:								
(1) Session I	2.30	71	.46	.11	NS	A(1)vsB(1)	.64	NS
(2) Session II	2.29	41	.55			A(2)vsB(2)	.51	NS
B. Entry - Female:								
(1) Session I	2.24	65	.47	.15	NS	B(1)vsC(2)	.63	NS
(2) Session II	2.23	64	.49			B(1)vsD(2)	1.09	NS
C. Upgrade, Session I:						C(2)vsD(2)	.33	NS
(1) Male	2.21	8	.59					
(2) Female	2.17	28	.50					
D. Equivalent, Session I:								
(1) Male	2.38	6	.48					
(2) Female	2.13	30	.40					
II. Intrinsic Benefits								
A. Entry - Male:								
(1) Session I	3.61	71	.70	.87	NS	A(1)vsB(1)	.30	NS
(2) Session II	3.48	41	.74			A(2)vsB(2)	.39	NS
B. Entry - Female:								
(1) Session I	3.65	65	.74	.79	NS	B(1)vsC(2)	.66	NS
(2) Session II	3.54	64	.72			B(1)vsD(2)	.30	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.00	NS
(1) Male	3.71	8	.80					
(2) Female	3.75	28	.56					
D. Equivalent, Session I:								
(1) Male	3.23	6	1.05					
(2) Female	3.60	30	.55					
III. Gratification Demands								
A. Entry - Male:								
(1) Session I	1.61	71	.85	.89	NS	A(1)vsB(1)	3.21	<.01
(2) Session II	1.77	41	1.02			A(2)vsB(2)	1.79	NS
B. Entry - Female:								
(1) Session I	2.11	65	.94	.15	NS	B(1)vsC(2)	1.12	NS
(2) Session II	2.13	64	1.00			B(1)vsD(2)	.63	NS
C. Upgrade, Session I:						C(2)vsD(2)	.46	NS
(1) Male	2.36	8	1.11					
(2) Female	1.86	28	.95					
D. Equivalent, Session I:								
(1) Male	1.25	6	.93					
(2) Female	1.98	30	.87					
IV. Interpersonal Relations with Co-Workers								
A. Entry - Male:								
(1) Session I	2.38	71	.82	.56	NS	A(1)vsB(1)	.76	NS
(2) Session II	2.29	41	.76			A(2)vsB(2)	1.40	NS
B. Entry - Female:								
(1) Session I	2.48	65	.79	2.86	<.01	B(1)vsC(2)	1.16	NS
(2) Session II	2.08	64	.72			B(1)vsD(2)	.07	NS

Value Category	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:						C(2)vsD(2)	.99	NS
(1) Male	2.65	8	.72					
(2) Female	2.28	28	.66					
D. Equivalent, Session I:								
(1) Male	2.47	6	.45					
(2) Female	2.47	30	.75					
V. Interpersonal Relations with Supervisor								
A. Entry - Male:								
(1) Session I	2.74	71	.67	1.15	NS	A(1)vsB(1)	2.23	<.05
(2) Session II	2.90	41	.75			A(2)vsB(2)	.71	NS
B. Entry - Female:								
(1) Session I	2.95	65	.56	.41	NS	B(1)vsC(2)	.91	NS
(2) Session II	3.00	64	.60			B(1)vsD(2)	1.44	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.89	NS
(1) Male	2.98	8	.64					
(2) Female	2.84	28	.49					
D. Equivalent, Session I:								
(1) Male	2.83	6	.55					
(2) Female	3.15	30	.70					
VI. Interpersonal Relations with Family								
A. Entry - Male:								
(1) Session I	3.91	71	1.55	.93	NS	A(1)vsB(1)	.28	NS
(2) Session II	3.60	41	1.74			A(2)vsB(2)	.76	NS
B. Entry - Female:								
(1) Session I	3.98	65	1.36	.62	NS	B(1)vsC(2)	.51	NS
(2) Session II	3.83	64	1.24			B(1)vsD(2)	.46	NS
C. Upgrade, Session I:						C(2)vsD(2)	.01	NS
(1) Male	4.37	8	1.08					
(2) Female	3.83	28	1.24					
D. Equivalent, Session I:								
(1) Male	4.58	6	.93					
(2) Female	3.83	30	1.54					
VII. Interpersonal Relations with Friends								
A. Entry - Male:								
(1) Session I	1.17	71	1.26	1.54	NS	A(1)vsB(1)	1.31	NS
(2) Session II	.81	41	.93			A(2)vsB(2)	.50	NS
B. Entry - Female:								
(1) Session I	.88	65	1.18	.85	NS	B(1)vsC(2)	1.00	NS
(2) Session II	.70	64	1.14			B(1)vsD(2)	.52	NS
C. Upgrade, Session I:						C(2)vsD(2)	.37	NS
(1) Male	1.87	8	1.36					
(2) Female	.63	28	.89					
D. Equivalent, Session I:								
(1) Male	.55	6	1.24					
(2) Female	.74	28	1.22					

Value Category	Mean	N	S.D.	t	p	Additional Comparisons	t	p
VIII. Developmental Needs								
A. Entry - Male:								
(1) Session I	3.87	71	1.27	.08	NS	A(1)vsB(1)	.80	NS
(2) Session II	3.84	41	1.21			A(2)vsB(2)	.92	NS
B. Entry - Female:								
(1) Session I	3.68	65	1.30	1.72	NS	B(1)vsC(2)	1.03	NS
(2) Session II	4.07	64	1.18			B(1)vsD(2)	1.44	NS
C. Upgrade, Session I:						C(2)vsD(2)	.28	NS
(1) Male	3.75	8	1.08					
(2) Female	3.99	28	1.27					
D. Equivalent, Session I:								
(1) Male	3.32	6	1.17					
(2) Female	4.08	30	1.01					

Appendix J

JOB DESCRIPTION INDEX RATINGS

Job Factor	Mean	N	S.D.	t	p	Additional Comparisons	t	p
1. Satisfaction with Work								
A. Entry - Male:								
(1) Session I	29.56	137	11.86	1.47	NS	A(1)vsC(1)	1.90	NS
(2) Session II	31.96	89	12.00			A(1)vsD(1)	.96	NS
B. Entry - Female:						A(1)vsE(1)	7.45	<.001
(1) Session I	34.11	116	10.42	1.09	NS			
(2) Session II	32.56	119	11.10			C(1)vsD(1)	.48	NS
C. Upgrade, Session I:						C(1)vsE(1)	1.10	NS
(1) Male	34.27	26	7.08			D(1)vsE(1)	1.09	NS
(2) Female	31.15	60	12.59					
D. Equivalent, Session I:						B(1)vsC(2)	2.57	<.01
(1) Male	33.09	11	5.25			B(1)vsD(2)	1.33	NS
(2) Female	31.86	59	10.59			B(1)vsE(2)	1.61	NS
E. *Normative Sample:						C(2)vsD(2)	.33	NS
(1) Male	36.57	1971	10.54					
(2) Female	35.74	638	9.88			C(2)vsE(2)	3.34	<.001
						D(2)vsE(2)	2.86	<.01
2. Satisfaction with Supervision								
A. Entry - Male:								
(1) Session I	38.13	137	12.22	.98	NS	A(1)vsC(1)	2.30	<.05
(2) Session II	39.69	89	10.69			A(1)vsD(1)	.61	NS
B. Entry - Female:						A(1)vsE(1)	3.15	<.01
(1) Session I	40.00	115	9.36	.42	NS			
(2) Session II	39.44	120	10.51			C(1)vsD(1)	2.78	<.01
C. Upgrade, Session I:						C(1)vsE(1)	1.32	NS
(1) Male	43.85	26	7.13			D(1)vsE(1)	1.65	NS
(2) Female	40.66	59	10.54					
D. Equivalent, Session I:						B(1)vsC(2)	.41	NS
(1) Male	35.82	11	9.22			B(1)vsD(2)	.19	NS
(2) Female	40.31	59	10.52			B(1)vsE(2)	1.11	NS
E. Normative Sample:						C(2)vsD(2)	.18	NS
(1) Male	41.10	1951	10.53					
(2) Female	[illegible].13	636	10.05			C(2)vsE(2)	.34	NS
						D(2)vsE(2)	.59	NS
3. Satisfaction with Pay								
A. Entry - Male:								
(1) Session I	10.89	137	8.78	.11	NS	A(1)vsC(1)	.18	NS
(2) Session II	10.76	89	6.29			A(1)vsD(1)	.57	NS
B. Entry - Female:						A(1)vsE(1)	15.11	<.001
(1) Session I	12.47	116	5.84	3.63	<.01			
(2) Session II	9.61	117	6.08			C(1)vsD(1)	.86	NS
C. Upgrade, Session I:						C(1)vsE(1)	6.77	<.001
(1) Male	10.58	26	5.19					
(2) Female	11.01	60	5.99			D(1)vsE(1)	3.97	<.001
D. Equivalent, Session I:						B(1)vsC(2)	1.55	NS
(1) Male	12.45	11	7.38			B(1)vsD(2)	2.19	<.05
(2) Female	10.27	59	6.98			B(1)vsE(2)	11.95	<.001

Job Factor	Mean	N	S.D.	t	p	Additional Comparisons	t	p
E. Normative Sample:						C(2)vsD(2)	.62	NS
(1) Male	29.90	1966	14.53					
(2) Female	27.90	635	13.65			C(2)vsE(2)	9.48	<.001
						D(2)vsE(2)	9.78	<.001
4. Satisfaction with Promotions								
A. Entry - Male:								
(1) Session I	16.53	137	7.65	.10	NS	A(1)vsC(1)	1.84	NS
(2) Session II	16.64	89	7.48			A(1)vsD(1)	1.21	NS
B. Entry - Female:						A(1)vsE(1)	4.05	<.001
(1) Session I	18.43	115	6.67	3.42	<.01			
(2) Session II	15.40	120	6.81			C(1)vsD(1)	2.03	<.05
C. Upgrade, Session I:						C(1)vsE(1)	2.77	<.01
(1) Male	13.46	26	8.13			D(1)vsE(1)	.54	NS
(2) Female	13.80	60	8.43					
D. Equivalent, Session I:						B(1)vsC(2)	3.95	<.001
(1) Male	19.45	11	7.57			B(1)vsD(2)	3.75	<.001
(2) Female	13.98	59	8.55			B(1)vsE(2)	.51	NS
E. Normative Sample:						C(2)vsD(2)	.12	NS
(1) Male	22.06	1945	15.77					
(2) Female	17.77	634	13.38			C(2)vsE(2)	2.25	<.05
						D(2)vsE(2)	2.13	<.05
5. Satisfaction with Co-Workers								
A. Entry - Male:								
(1) Session I	38.37	137	12.07	.84	NS	A(1)vsC(1)	2.03	<.05
(2) Session II	39.78	89	12.63			A(1)vsD(1)	.73	NS
B. Entry - Female:								
(1) Session I	39.12	116	11.85	.38	NS	A(1)vsE(1)	5.67	<.001
(2) Session II	38.51	118	12.26			C(1)vsD(1)	.66	NS
C. Upgrade, Session I:						C(1)vsE(1)	.02	NS
(1) Male	43.54	26	10.53					
(2) Female	37.87	60	14.18			D(1)vsE(1)	.79	NS
D. Equivalent, Session I:						B(1)vsC(2)	.62	NS
(1) Male	41.09	11	8.75			B(1)vsD(2)	.35	NS
(2) Female	39.78	59	11.34			B(1)vsE(2)	2.73	<.01
E. Normative Sample:								
(1) Male	43.49	1928	10.02			C(2)vsD(2)	.81	NS
(2) Female	42.09	636	10.51			C(2)vsE(2)	2.87	<.01
						D(2)vsE(2)	1.60	NS

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*Smith, Patricia C., Kendall, Lorne M., and Hulin, Charles L. The Measurement of Satisfaction in Work and Retirement. Chicago, Ill.: Rand McNally & Company, 1969.

Appendix K

RATINGS OF PSYCHOLOGICAL TESTS: LIKERT-TYPE CONDITION

Test	Mean	N	S.D.	t	p	Additional Comparisons	t	p
1. Cynical distrust of people								
A. Entry - Male:								
(1) Session I	20.81	67	4.16	1.15	NS	A(1)vsB(1)	.24	NS
(2) Session II	19.73	49	5.76			A(2)vsB(2)	.64	NS
B. Entry - Female:								
(1) Session I	21.02	49	5.00	.57	NS	A(1)vsC(1)	.75	NS
(2) Session II	20.43	55	5.17			B(1)vsC(2)	1.39	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.25	NS
(1) Male	19.95	19	4.75	2.03	<.05	C(2)vsD(2)	.21	NS
(2) Female	22.55	29	3.89					
D. Equivalent, Session I:								
(1) Male	20.60	5	4.96					
(2) Female	22.34	29	3.28					
2. Cynical distrust of organizations								
A. Entry - Male:								
(1) Session I	20.07	67	4.14	1.44	NS	A(1)vsB(1)	.41	NS
(2) Session II	21.18	49	3.96			A(2)vsB(2)	.93	NS
B. Entry - Female:								
(1) Session I	19.75	49	4.05	.52	NS	A(1)vsC(1)	.27	NS
(2) Session II	20.27	55	5.65			B(1)vsC(2)	.17	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.74	NS
(1) Male	20.37	19	3.66	.34	NS	C(2)vsD(2)	1.32	NS
(2) Female	19.93	29	4.44					
D. Equivalent, Session I:								
(1) Male	18.60	5	3.01					
(2) Female	21.34	29	3.46					
3. Weak self regard								
A. Entry - Male:								
(1) Session I	13.42	67	5.24	.70	NS	A(1)vsB(1)	.45	NS
(2) Session II	12.69	49	5.67			A(2)vsB(2)	1.13	NS
B. Entry - Female:								
(1) Session I	13.87	49	5.42	.09	NS	A(1)vsC(1)	.67	NS
(2) Session II	13.98	56	5.82			B(1)vsC(2)	.60	NS
C. Upgrade, Session I:						B(1)vsD(2)	.87	NS
(1) Male	12.42	19	6.74	1.30	NS	C(2)vsD(2)	.28	NS
(2) Female	14.62	29	4.66					
D. Equivalent, Session I:								
(1) Male	16.00	5	6.81					
(2) Female	15.00	29	5.41					
4. Achievement motivation								
A. Entry - Male:								
(1) Session I	30.18	67	5.23	1.32	NS	A(1)vsB(1)	.69	NS
(2) Session II	31.40	49	4.36			A(2)vsB(2)	.95	NS
B. Entry - Female:								
(1) Session I	30.85	49	5.07	.35	NS	A(1)vsC(1)	1.95	NS
(2) Session II	30.49	55	5.23			B(1)vsC(2)	.58	NS

Test	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:						B(1)vsD(2)	.62	NS
(1) Male	32.84	19	4.98	2.22	<.05	C(2)vsD(2)	.17	NS
(2) Female	30.24	29	2.96					
D. Equivalent, Session I:								
(1) Male	35.20	5	1.33					
(2) Female	30.00	29	6.88					
5. Time sense								
A. Entry - Male:								
(1) Session I	29.45	67	6.88	.16	NS	A(1)vsB(1)	.56	NS
(2) Session II	29.24	49	5.87			A(2)vsB(2)	.87	NS
B. Entry - Female:						A(1)vsC(1)	.66	NS
(1) Session I	28.73	49	6.40	.46	NS			
(2) Session II	28.12	55	6.86			B(1)vsC(2)	.14	NS
C. Upgrade, Session I:						B(1)vsD(2)	.24	NS
(1) Male	28.26	19	6.55	.13	NS	C(2)vsD(2)	.36	NS
(2) Female	28.52	29	5.88					
D. Equivalent, Session I:								
(1) Male	25.80	5	5.11					
(2) Female	29.10	29	6.14					
6. Protestant ethic								
A. Entry - Male:								
(1) Session I	23.64	67	5.29	.[illegible]9	NS	A(1)vsB(1)	1.25	NS
(2) Session II	23.73	49	4.79			A(2)vsB(2)	.59	NS
B. Entry - Female:						A(1)vsC(1)	.68	NS
(1) Session I	24.87	49	5.09	.60	NS			
(2) Session II	24.29	55	4.67			B(1)vsC(2)	.49	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.39	NS
(1) Male	24.53	19	3.28	.17	NS	C(2)vsD(2)	1.02	NS
(2) Female	24.34	29	3.54					
D. Equivalent, Session I:								
(1) Male	24.00	5	4.65					
(2) Female	23.34	29	3.74					
7. Expectation of success								
A. Entry - Male:								
(1) Session I	21.23	66	4.18	1.08	NS	A(1)vsB(1)	2.37	<.02
(2) Session II	22.10	49	4.25			A(2)vsB(2)	1.48	NS
B. Entry - Female:						A(1)vsC(1)	.48	NS
(1) Session I	23.17	48	4.36	.14	NS			
(2) Session II	23.29	55	3.82			B(1)vsC(2)	.09	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.12	NS
(1) Male	21.79	19	5.08	.93	NS	C(2)vsD(2)	1.12	NS
(2) Female	23.07	29	4.13					
D. Equivalent, Session I:								
(1) Male	21.40	5	6.09					
(2) Female	24.31	29	4.13					
8. Powerlessness								
A. Entry - Male:								
(1) Session I	10.91	67	4.01	.74	NS	A(1)vsB(1)	1.19	NS
(2) Session II	11.44	49	3.47			A(2)vsB(2)	.76	NS

Test	Mean	N	S.D.	t	p	Additional Comparisons	t	p
B. Entry - Female:								
(1) Session I	10.02	49	3.80	1.27	NS	A(1)vsC(1)	.75	NS
(2) Session II	10.92	55	3.38			B(1)vsC(2)	.98	NS
C. Upgrade, Session I:						B(1)vsD(2)	1.30	NS
(1) Male	10.11	19	4.23	.65	NS	C(2)vsD(2)	.24	NS
(2) Female	10.97	29	4.39					
D. Equivalent, Session I:								
(1) Male	13.40	5	4.72					
(2) Female	11.24	29	4.15					
9. Meaninglessness								
A. Entry - Male:								
(1) Session I	9.15	67	3.15	1.08	NS	A(1)vsB(1)	1.74	NS
(2) Session II	9.79	49	3.14			A(2)vsB(2)	1.30	NS
B. Entry - Female:						A(1)vsC(1)	1.46	NS
(1) Session I	8.14	49	2.90	1.27	NS	B(1)vsC(2)	.09	NS
(2) Session II	8.94	55	3.41					
C. Upgrade, Session I:						B(1)vsD(2)	.88	NS
(1) Male	7.95	19	3.03	.27	NS	C(2)vsD(2)	.66	NS
(2) Female	8.21	29	3.16					
D. Equivalent, Session I:								
(1) Male	6.80	5	1.72					
(2) Female	8.76	29	3.01					
10. Normlessness								
A. Entry - Male:								
(1) Session I	14.45	67	5.01	.94	NS	A(1)vsB(1)	1.75	NS
(2) Session II	13.57	49	4.78			A(2)vsB(2)	1.02	NS
B. Entry - Female:						A(1)vsC(1)	2.91	<.01
(1) Session I	12.89	49	4.12	.23	NS	B(1)vsC(2)	2.00	<.05
(2) Session II	12.70	55	3.68					
C. Upgrade, Session I:						B(1)vsD(2)	1.84	NS
(1) Male	10.84	19	3.44	3.37	<.01	C(2)vsD(2)	.05	NS
(2) Female	14.90	29	4.30					
D. Equivalent, Session I:								
(1) Male	12.80	5	4.40					
(2) Female	14.83	29	4.83					
11. Value isolation								
A. Entry - Male:								
(1) Session I	9.03	67	3.42	.86	NS	A(1)vsB(1)	1.25	NS
(2) Session II	8.46	49	3.39			A(2)vsB(2)	.01	NS
B. Entry - Female:						A(1)vsC(1)	1.59	NS
(1) Session I	8.24	49	3.12	.35	NS	B(1)vsC(2)	.85	NS
(2) Session II	8.48	56	3.66					
C. Upgrade, Session I:						B(1)vsD(2)	1.25	NS
(1) Male	7.58	19	3.60	1.25	NS	C(2)vsD(2)	.31	NS
(2) Female	8.90	29	2.98					
D. Equivalent, Session I:								
(1) Male	8.80	5	2.99					
(2) Female	9.17	29	3.10					

Test	Mean	N	S.D.	t	p	Additional Comparisons	t	p
12. Self-estrangement								
A. Entry - Male:								
(1) Session I	14.04	67	3.88	.27	NS	A(1)vsB(1)	.57	NS
(2) Session II	14.24	49	4.05			A(2)vsB(2)	2.21	<.05
B. Entry - Female:						A(1)vsC(1)	1.03	NS
(1) Session I	14.57	49	5.84	1.62	NS			
(2) Session II	16.43	55	5.71			B(1)vsC(2)	.59	NS
C. Upgrade, Session I:						B(1)vsD(2)	.01	NS
(1) Male	13.00	19	3.74	.82	NS	C(2)vsD(2)	.82	NS
(2) Female	13.86	29	3.31					
D. Equivalent, Session I:								
(1) Male	14.80	5	2.79					
(2) Female	14.59	29	3.27					
13. Work demands								
A. Entry - Male:								
(1) Session I	23.01	67	3.22	.42	NS	A(1)vsB(1)	2.66	<.01
(2) Session II	22.71	49	4.21			A(2)vsB(2)	1.33	NS
B. Entry - Female:						A(1)vsC(1)	1.89	NS
(1) Session I	25.32	49	4.42	1.46	NS			
(2) Session II	23.94	55	5.01			B(1)vsC(2)	1.55	NS
C. Upgrade, Session I:						B(1)vsD(2)	3.16	<.01
(1) Male	25.26	19	3.89	1.18	NS	C(2)vsD(2)	1.13	NS
(2) Female	23.59	29	5.13					
D. Equivalent, Session I:								
(1) Male	26.60	5	3.07					
(2) Female	22.28	29	3.35					
14. Orientation toward work								
A. Entry - Male:								
(1) Session I	2.62	65	1.24	.95	NS	A(1)vsB(1)	1.41	NS
(2) Session II	2.85	48	1.33			A(2)vsB(2)	.12	NS
B. Entry - Female:						A(1)vsC(1)	.37	NS
(1) Session I	3.06	49	2.08	.69	NS			
(2) Session II	2.82	56	1.37			B(1)vsC(2)	.02	NS
C. Upgrade, Session I:						B(1)vsD(2)	.06	NS
(1) Male	2.74	19	1.16	.93	NS	C(2)vsD(2)	.50	NS
(2) Female	3.07	27	1.18					
D. Equivalent, Session I:								
(1) Male	2.60	5	1.02					
(2) Female	3.03	29	1.19					

Appendix K-1

RATINGS OF PSYCHOLOGICAL TESTS: LIKERT-TYPE CONDITION

(Responses of Entry-Level Subjects Participating in Both Sessions)

Test	Mean	N	Standard Deviation	t	p
1. Cynical distrust of people					
A. Entry - Male:					
(1) Session I	20.18	32	4.88	.39	NS
(2) Session II	20.53	32	5.20		
B. Entry - Female:					
(1) Session I	21.00	40	5.04	.20	NS
(2) Session II	20.80	40	5.67		
2. Cynical distrust of organizations					
A. Entry - Male:					
(1) Session I	20.50	32	4.25	1.95	NS
(2) Session II	21.68	32	3.84		
B. Entry - Female:					
(1) Session I	18.65	40	4.78	.49	NS
(2) Session II	19.15	40	6.60		
3. Weak self-regard					
A. Entry - Male:					
(1) Session I	12.48	32	5.90	1.70	NS
(2) Session II	13.74	32	6.19		
B. Entry - Female:					
(1) Session I	13.56	41	5.35	.09	NS
(2) Session II	13.48	41	5.58		
4. Achievement motivation					
A. Entry - Male:					
(1) Session I	30.62	32	5.32	.56	NS
(2) Session II	31.15	32	4.91		
B. Entry - Female:					
(1) Session I	30.70	40	5.61	.93	NS
(2) Session II	29.95	40	5.29		
5. Time sense					
A. Entry - Male:					
(1) Session I	29.00	32	7.11	.30	NS
(2) Session II	28.68	32	5.84		
B. Entry - Female:					
(1) Session I	28.64	40	6.83	.28	NS
(2) Session II	28.35	40	6.11		

Test	Mean	N	Standard Deviation	t	p
6. Protestant ethic					
A. Entry - Male:					
(1) Session I	24.81	32	5.46	1.15	NS
(2) Session II	23.50	32	4.89		
B. Entry - Female:					
(1) Session I	25.25	40	6.36	2.00	<.05
(2) Session II	23.53	40	5.80		
7. Expectation of success					
A. Entry - Male:					
(1) Session I	21.56	32	4.30	.54	NS
(2) Session II	21.96	32	3.45		
B. Entry - Female:					
(1) Session I	23.53	40	4.05	.88	NS
(2) Session II	22.84	40	3.81		
8. Powerlessness					
A. Entry - Male:					
(1) Session I	10.09	32	3.41	2.69	<.05
(2) Session II	11.81	32	3.43		
B. Entry - Female:					
(1) Session I	9.65	40	3.25	1.57	NS
(2) Session II	10.72	40	3.32		
9. Meaninglessness					
A. Entry - Male:					
(1) Session I	9.25	32	3.41	2.37	<.05
(2) Session II	10.43	32	3.21		
B. Entry - Female:					
(1) Session I	7.85	40	2.60	1.31	NS
(2) Session II	8.50	40	2.72		
10. Normlessness					
A. Entry - Male:					
(1) Session I	13.78	32	5.20	1.15	NS
(2) Session II	14.71	32	4.78		
B. Entry - Female:					
(1) Session I	12.22	40	3.65	1.13	NS
(2) Session II	12.87	40	3.16		

Test	Mean	N	Standard Deviation	t	p
11. Value isolation					
A. Entry - Male:					
(1) Session I	8.28	32	3.74	1.73	NS
(2) Session II	9.37	32	3.23		
B. Entry - Female:					
(1) Session I	7.85	41	2.79	1.25	NS
(2) Session II	8.56	41	3.57		
12. Self-estrangement					
A. Entry - Male:					
(1) Session I	13.00	32	3.42	2.79	<.01
(2) Session II	14.78	32	4.40		
B. Entry - Female:					
(1) Session I	13.68	41	4.16	2.64	<.05
(2) Session II	15.39	41	3.71		
13. Work demands					
A. Entry - Male:					
(1) Session I	21.90	32	5.49	.63	NS
(2) Session II	22.59	32	4.24		
B. Entry - Female:					
(1) Session I	25.45	40	4.78	2.70	<.05
(2) Session II	23.40	40	4.90		
14. Orientation toward work					
A. Entry - Male:					
(1) Session I	2.61	32	1.17	2.59	<.05
(2) Session II	3.16	32	1.18		
B. Entry - Female:					
(1) Session I	2.82	41	1.87	.64	NS
(2) Session II	3.00	41	1.43		

Appendix L

RATINGS OF PSYCHOLOGICAL TESTS: FORCED-CHOICE CONDITION

Test	Mean	N	S.D.	t	p	Additional Comparisons	t	p
1. Cynical distrust of people								
A. Entry - Male:								
(1) Session I	1.31	70	1.22	.87	NS	A(1)vsB(1)	.60	NS
(2) Session II	1.53	39	1.42			A(2)vsB(2)	.47	NS
B. Entry - Female:								
(1) Session I	1.49	65	2.07	.59	NS	B(1)vsC(2)	.13	NS
(2) Session II	1.67	64	1.31			B(1)vsD(2)	.68	NS
C. Upgrade, Session I:						C(2)vsD(2)	.66	NS
(1) Male	1.11	9	1.37					
(2) Female	1.55	29	1.38					
D. Equivalent, Session I:								
(1) Male	1.33	6	1.25					
(2) Female	1.77	30	1.02					
2. Cynical distrust of organizations								
A. Entry - Male:								
(1) Session I	1.26	71	1.47	1.02	NS	A(1)vsB(1)	.86	NS
(2) Session II	1.53	39	1.08			A(2)vsB(2)	1.61	NS
B. Entry - Female:								
(1) Session I	1.57	65	2.48	1.11	NS	B(1)vsC(2)	.79	NS
(2) Session II	1.96	64	1.41			B(1)vsD(2)	.40	NS
C. Upgrade, Session I:						C(2)vsD(2)	.55	NS
(1) Male	.88	9	.74					
(2) Female	1.96	29	1.42					
D. Equivalent, Session I:								
(1) Male	2.17	6	1.67					
(2) Female	1.77	30	1.26					
3. Weak self regard								
A. Entry - Male:								
(1) Session I	1.09	71	1.14	.24	NS	A(1)vsB(1)	.59	NS
(2) Session II	1.15	40	1.33			A(2)vsB(2)	.60	NS
B. Entry - Female:								
(1) Session I	1.26	65	1.96	.17	NS	B(1)vsC(2)	.47	NS
(2) Session II	1.31	64	1.32			B(1)vsD(2)	.67	NS
C. Upgrade, Session I:						C(2)vsD(2)	.27	NS
(1) Male	.67	9	.82					
(2) Female	1.45	29	1.16					
D. Equivalent, Session I:								
(1) Male	1.17	6	1.07					
(2) Female	1.53	30	1.18					
4. Achievement motivation								
A. Entry - Male:								
(1) Session I	4.07	71	1.48	2.23	<.05	A(1)vsB(1)	.22	NS
(2) Session II	4.66	39	.99			A(2)vsB(2)	2.25	<.05
B. Entry - Female:								
(1) Session I	4.12	65	1.21	.17	NS	B(1)vsC(2)	.05	NS
(2) Session II	4.15	64	1.16			B(1)vsD(2)	1.04	NS

Test	Mean	N	S.D.	t	p	Additional Comparisons	t	p
C. Upgrade, Session I:						C(2)vsD(2)	.79	NS
(1) Male	4.00	9	1.83					
(2) Female	4.14	29	1.33					
D. Equivalent, Session I:								
(1) Male	4.33	6	1.49					
(2) Female	4.40	30	1.14					
5. Time sense								
A. Entry - Male:								
(1) Session I	4.23	71	1.08	.12	NS	A(1)vsB(1)	1.42	NS
(2) Session II	4.25	39	.95			A(2)vsB(2)	.28	NS
B. Entry - Female:								
(1) Session I	4.58	65	1.68	1.57	NS	B(1)vsC(2)	.62	NS
(2) Session II	4.20	64	.90			B(1)vsD(2)	.76	NS
C. Upgrade, Session I:						C(2)vsD(2)	.21	NS
(1) Male	4.44	9	.50					
(2) Female	4.38	29	.76					
D. Equivalent, Session I:								
(1) Male	4.00	6	1.00					
(2) Female	4.33	30	.83					
6. Protestant ethic								
A. Entry - Male:								
(1) Session I	3.09	71	1.62	.29	NS	A(1)vsB(1)	.68	NS
(2) Session II	3.17	39	1.35			A(2)vsB(2)	1.32	NS
B. Entry - Female:								
(1) Session I	3.32	65	2.13	1.66	NS	B(1)vsC(2)	1.14	NS
(2) Session II	2.75	64	1.70			B(1)vsD(2)	1.30	NS
C. Upgrade, Session I:						C(2)vsD(2)	.27	NS
(1) Male	3.11	9	1.37					
(2) Female	2.83	29	1.29					
D. Equivalent, Session I:								
(1) Male	3.17	6	.90					
(2) Female	2.93	30	1.57					
7. Expectation of success								
A. Entry - Male:								
(1) Session I	2.43	71	1.03	1.27	NS	A(1)vsB(1)	1.88	NS
(2) Session II	2.69	39	1.01			A(2)vsB(2)	.13	NS
B. Entry - Female:								
(1) Session I	2.94	65	1.95	.82	NS	B(1)vsC(2)	.80	NS
(2) Session II	2.71	64	.87			B(1)vsD(2)	1.09	NS
C. Upgrade, Session I:						C(2)vsD(2)	.35	NS
(1) Male	2.00	9	.67					
(2) Female	2.62	29	1.13					
D. Equivalent, Session I:								
(1) Male	2.83	6	.90					
(2) Female	2.53	30	.72					
8. Powerlessness								
A. Entry - Male:								
(1) Session I	.36	71	1.11	.27	NS	A(1)vsB(1)	.12	NS
(2) Session II	.30	39	.56			A(2)vsB(2)	.09	NS

Test	Mean	N	S.D.	t	p	Additional Comparisons	t	p
B. Entry - Female:								
(1) Session I	.40	65	1.89	.41	NS	B(1)vsC(2)	.22	NS
(2) Session II	.29	64	.57			B(1)vsD(2)	.47	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.52	NS
(1) Male	.22	9	.42					
(2) Female	.48	29	.72					
D. Equivalent, Session I:								
(1) Male	.00	6	.00					
(2) Female	.23	30	.50					
9. Meaninglessness								
A. Entry - Male:								
(1) Session I	.28	71	.48	.81	NS	A(1)vsB(1)	.48	NS
(2) Session II	.20	39	.40			A(2)vsB(2)	.19	NS
B. Entry - Female:								
(1) Session I	.40	65	1.98	.82	NS	B(1)vsC(2)	.32	NS
(2) Session II	.18	64	.46			B(1)vsD(2)	.63	NS
C. Upgrade, Session I:						C(2)vsD(2)	1.00	NS
(1) Male	.22	9	.42					
(2) Female	.28	29	.45					
D. Equivalent, Session I:								
(1) Male	.00	6	.00					
(2) Female	.17	30	.37					
10. Normlessness								
A. Entry - Male:								
(1) Session I	.71	71	.69	.86	NS	A(1)vsB(1)	.80	NS
(2) Session II	.82	40	.62			A(2)vsB(2)	.96	NS
B. Entry - Female:								
(1) Session I	.98	65	2.69	.07	NS	B(1)vsC(2)	.10	NS
(2) Session II	.95	64	.67			B(1)vsD(2)	.22	NS
C. Upgrade, Session I:						C(2)vsD(2)	.95	NS
(1) Male	.67	9	.47					
(2) Female	.93	29	.64					
D. Equivalent, Session I:								
(1) Male	.50	6	.76					
(2) Female	1.10	30	.70					
11. Value isolation								
A. Entry - Male:								
(1) Session I	.50	71	.72	.08	NS	A(1)vsB(1)	.19	NS
(2) Session II	.51	39	.74			A(2)vsB(2)	.79	NS
B. Entry - Female:								
(1) Session I	.55	65	1.89	.29	NS	B(1)vsC(2)	.23	NS
(2) Session II	.62	64	.64			B(1)vsD(2)	.24	NS
C. Upgrade, Session I:						C(2)vsD(2)	.83	NS
(1) Male	.56	9	.68					
(2) Female	.64	28	.72					
D. Equivalent, Session I:								
(1) Male	.17	6	.37					
(2) Female	.47	30	.67					

Test	Mean	N	S.D.	t	p	Additional Comparisons	t	p
12. Self-estrangement								
A. Entry - Male:								
(1) Session I	.67	71	.76	.75	NS	A(1)vsB(1)	1.43	NS
(2) Session II	.55	38	.78			A(2)vsB(2)	1.61	NS
B. Entry - Female:						B(1)vsC(2)	.52	NS
(1) Session I	1.09	65	2.29	.86	NS			
(2) Session II	.82	64	.83			B(1)vsD(2)	.29	NS
C. Upgrade, Session I:						C(2)vsD(2)	.48	NS
(1) Male	.67	9	1.05					
(2) Female	.86	29	.85					
D. Equivalent, Session I:								
(1) Male	.50	6	.76					
(2) Female	.97	30	.75					
13. Work demands								
A. Entry - Male:								
(1) Session I	2.81	71	1.07	1.05	NS	A(1)vsB(1)	.98	NS
(2) Session II	3.02	39	.91			A(2)vsB(2)	2.35	<.05
B. Entry - Female:						B(1)vsC(2)	1.92	NS
(1) Session I	3.09	65	2.05	1.95	NS			
(2) Session II	2.51	64	1.13			B(1)vsD(2)	.06	NS
C. Upgrade, Session I:						C(2)vsD(2)	2.39	<.02
(1) Male	3.00	9	1.56					
(2) Female	2.28	29	1.44					
D. Equivalent, Session I:								
(1) Male	4.00	6	.58					
(2) Female	3.07	30	1.03					
14. Orientation toward work								
A. Entry - Male:								
(1) Session I	2.67	71	1.18	.34	NS	A(1)vsB(1)	1.44	NS
(2) Session II	2.75	40	1.13			A(2)vsB(2)	.47	NS
B. Entry - Female:						B(1)vsC(2)	.24	NS
(1) Session I	2.38	65	1.15	2.36	<.05			
(2) Session II	2.85	64	1.13			B(1)vsD(2)	4.56	<.001
C. Upgrade, Session I:						C(2)vsD(2)	3.54	<.001
(1) Male	2.67	9	.82					
(2) Female	2.45	29	1.22					
D. Equivalent, Session I:								
(1) Male	1.83	6	1.07					
(2) Female	3.53	30	1.09					

Appendix M

SUBORDINATES' RATINGS OF SUPERVISORS ON (1) CONSIDERATION AND (2) INITIATION OF STRUCTURE SCALES AS A FUNCTION OF SUBORDINATES' SEX AND ETHNIC GROUP

Supervisor Rating Scale	Mean	N	Standard Deviation	t	p
1. Consideration					
Subordinate Classification:					
A. White Males	54.34	55	10.94	1.59	NS
B. White Females	59.26	15	8.38		
C. Black Males	48.36	30	11.99	1.18	NS
D. Black Females	51.66	86	13.33		
	A vs. C			2.29	<.05
	B vs. D			2.11	<.05
	A&B vs. C&D			2.18	<.05
	A&C vs. B&D			.30	NS
2. Initiation of Structure					
Subordinate Classification:					
A. White Males	54.45	55	8.16	.61	NS
B. White Females	55.93	15	8.31		
C. Black Males	51.10	30	7.74	1.39	NS
D. Black Females	53.63	86	8.77		
	A vs. C			1.82	NS
	B vs. D			.93	NS
	A&B vs. C&D			1.39	NS
	A&C vs. B&D			.56	NS

Appendix N

SUBORDINATES' RATINGS OF SUPERVISORS ON (1) CONSIDERATION AND (2) INITIATION OF STRUCTURE SCALES AS A FUNCTION OF SUPERVISORS' SEX AND ETHNIC GROUP

Supervisor Rating Scale	Mean	N	Standard Deviation	t	p
1. Consideration					
Supervisor Classification:					
A. White Males	53.15	76	11.52	0.87	NS
B. White Females	51.02	42	14.36		
C. Black Males	53.67	28	10.19	0.50	NS
D. Black Females	52.15	40	13.09		
	A vs. C			0.20	NS
	B vs. D			0.36	NS
	A&B vs. C&D			0.20	NS
	A&C vs. B&D			0.93	NS
2. Initiation of Structure					
Supervisor Classification:					
A. White Males	53.18	76	9.18	1.41	NS
B. White Females	55.59	42	7.95		
C. Black Males	55.75	28	7.14	2.51	<.05
D. Black Females	51.05	40	7.71		
	A vs. C			1.32	NS
	B vs. D			2.59	<.05
	A&B vs. C&D			0.81	NS
	A&C vs. B&D			0.39	NS

Appendix O

RATINGS OF AVERAGE NON-PSC SUBORDINATE[a] BY SUPERVISORS AS A FUNCTION OF SEX AND ETHNIC GROUP OF THE SUPERVISOR

Subordinate Rating Scale	Mean	N	Standard Deviation	t	p
1. Performance of the Worker					
Supervisor Classification:					
A. White Male	20.50	38	4.16	1.45	NS
B. White Female	19.00	25	3.66		
C. Black Male	19.42	14	4.30	.91	NS
D. Black Female	20.59	27	3.63		
	A&B vs. C&D			.36	NS
	A&C vs. B&D			.49	NS
2. Adjustment of the Worker					
Supervisor Classification:					
A. White Male	20.05	38	3.76	.70	NS
B. White Female	19.32	25	4.42		
C. Black Male	20.35	14	5.10	1.10	NS
D. Black Female	21.70	27	2.77		
	A&B vs. C&D			1.88	NS
	A&C vs. B&D			.54	NS
3. Motivation of the Worker					
Supervisor Classification:					
A. White Male	21.05	38	4.17	.33	NS
B. White Female	20.68	25	4.60		
C. Black Male	20.57	14	4.29	.12	NS
D. Black Female	20.77	27	5.30		
	A&B vs. C&D			.21	NS
	A&C vs. B&D			.21	NS
4. Stability of the Worker					
Supervisor Classification:					
A. White Male	17.47	38	3.85	1.02	NS
B. White Female	16.36	25	4.67		
C. Black Male	17.07	14	4.81	.56	NS
D. Black Female	16.29	27	3.81		
	A&B vs. C&D			.56	NS
	A&C vs. B&D			1.27	NS

Subordinate Rating Scale	Mean	N	Standard Deviat[illegible]	t	p
5. Potential of the Worker					
Supervisor Classification:					
A. White Male	18.00	38	3.85	.59	NS
B. White Female	18.64	25	4.62		
C. Black Male	18.50	14	3.50	.01	NS
D. Black Female	18.48	27	5.16		
	A&B vs. C&D			.26	NS
	A&C vs. B&D			.49	NS

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*All supervisors did not complete.

Appendix P

RATINGS OF PSC ENTRY-LEVEL SUBORDINATES BY SUPERVISORS AS A FUNCTION OF SEX AND ETHNIC GROUP OF THE SUPERVISOR

(Ratings based on an average rating of subordinates in cases where a supervisor reported multiple subordinates)

Subordinate Rating Scale	Mean	N	Standard Deviation	t	p
1. Performance of the Worker					
Supervisor Classification:					
A. White Male	18.89	46	4.32	.38	NS
B. White Female	18.50	31	4.55		
C. Black Male	20.64	18	3.46	1.68	NS
D. Black Female	18.65	29	4.18		
	A&B vs. C&D			.86	NS
	A&C vs. B&D			1.05	NS
2. Adjustment of the Worker					
Supervisor Classification:					
A. White Male	20.73	46	3.56	.98	NS
B. White Female	21.50	31	3.06		
C. Black Male	22.58	18	3.78	1.15	NS
D. Black Female	21.25	29	3.86		
	A&B vs. C&D			1.10	NS
	A&C vs. B&D			.20	NS
3. Motivation of the Worker					
Supervisor Classification:					
A. White Male	21.02	46	4.22	.11	NS
B. White Female	20.90	31	4.88		
C. Black Male	20.64	18	5.83	.00	NS
D. Black Female	20.63	29	5.63		
	A&B vs. C&D			.36	NS
	A&C vs. B&D			.16	NS
4. Stability of the Worker					
Supervisor Classification:					
A. White Male	16.46	46	3.76	.60	NS
B. White Female	17.02	31	4.12		
C. Black Male	16.94	18	3.64	1.15	NS
D. Black Female	15.56	29	4.15		
	A&B vs. C&D			.81	NS
	A&C vs. B&D			.39	NS

Subordinate Rating Scale	Mean	N	Standard Deviation	t	p
5. Potential of the Worker					
Supervisor Classification:					
A. White Male	17.65	46	4.45	.29	NS
B. White Female	17.96	31	4.50		
C. Black Male	18.79	18	4.58	.91	NS
D. Black Female	17.54	29	4.54		
	A&B vs. C&D			.29	NS
	A&C vs. B&D			.26	NS

Appendix Q

COMPARISON OF SUPERVISORS' RATINGS OF AVERAGE NON-PSC SUBORDINATE AND PSC SUBORDINATES: (1) AS A FUNCTION OF ETHNIC GROUP AND SEX OF SUPERVISOR AND (2) ALL SUPERVISORS COMBINED

(Ratings based on an average rating of subordinates in cases where a supervisor reported multiple subordinates)

Supervisor Classification	Subordinate Rating Scale: Performance of the Worker				
	Mean	N	Standard Deviation	t	p
A. White (Male and Female)					
Average Non-PSC	19.90	63	4.01	1.62	NS
PSC Subordinate	18.73	77	4.36		
B. Black (Male and Female)					
Average Non-PSC	20.19	41	3.81	.92	NS
PSC Subordinate	19.41	47	3.96		
C. Male (Black and White)					
Average Non-PSC	20.21	52	4.23	1.05	NS
PSC Subordinate	19.38	64	4.12		
D. Female (Black and White)					
Average Non-PSC	19.82	52	3.69	1.62	NS
PSC Subordinate	18.57	60	4.31		
E. Combined					
Average Non-PSC	19.93	117	3.98	1.76	NS
PSC Subordinate	18.99	124	4.23		

Supervisor Classification	Subordinate Rating Scale: Adjustment of the Worker				
	Mean	N	Standard Deviation	t	p
A. White (Male and Female)					
Average Non-PSC	19.76	63	4.01	2.04	<.05
PSC Subordinate	21.04	77	3.34		
B. Black (Male and Female)					
Average Non-PSC	21.24	41	3.68	.64	NS
PSC Subordinate	21.76	47	3.80		
C. Male (Black and White)					
Average Non-PSC	20.13	52	4.14	1.52	NS
PSC Subordinate	21.25	64	3.66		
D. Female (Black and White)					
Average Non-PSC	20.55	52	3.81	1.19	NS
PSC Subordinate	21.38	60	3.41		
E. Combined					
Average Non-PSC	20.56	117	3.89	1.56	NS
PSC Subordinate	21.31	124	3.54		

Supervisor Classification	Subordinate Rating Scale: Motivation of the Worker				
	Mean	N	Standard Deviation	t	p
A. White (Male and Female)					
Average Non-PSC	20.90	63	4.31	.09	NS
PSC Subordinate	20.97	77	4.44		
B. Black (Male and Female)					
Average Non-PSC	20.70	41	4.87	.05	NS
PSC Subordinate	20.64	47	5.58		
C. Male (Black and White)					
Average Non-PSC	20.92	52	4.20	.00	NS
PSC Subordinate	20.91	64	4.64		
D. Female (Black and White)					
Average Non-PSC	20.75	52	4.93	.04	NS
PSC Subordinate	20.77	60	5.17		
E. Combined					
Average Non-PSC	20.82	117	4.57	.04	NS
PSC Subordinate	20.84	124	4.91		

Supervisor Classification	Subordinate Rating Scale: Stability of the Worker				
	Mean	N	Standard Deviation	t	p
A. White (Male and Female)					
Average Non-PSC	17.03	63	4.18	.49	NS
PSC Subordinate	16.69	77	3.87		
B. Black (Male and Female)					
Average Non-PSC	16.56	41	4.08	.53	NS
PSC Subordinate	16.09	47	3.94		
C. Male (Black and White)					
Average Non-PSC	17.36	52	4.12	1.04	NS
PSC Subordinate	16.60	64	3.67		
D. Female (Black and White)					
Average Non-PSC	16.32	52	4.20	.00	NS
PSC Subordinate	16.32	60	4.13		
E. Combined					
Average Non-PSC	16.82	117	4.43	.65	NS
PSC Subordinate	16.46	124	3.91		

Supervisor Classification	Subordinate Rating Scale: Potential of the Worker				
	Mean	N	Standard Deviation	t	p
A. White (Male and Female)					
Average Non-PSC	18.25	63	4.15	.64	NS
PSC Subordinate	17.78	77	4.41		
B. Black (Male and Female)					
Average Non-PSC	18.48	41	4.55	.47	NS
PSC Subordinate	18.02	47	4.50		
C. Male (Black and White)					
Average Non-PSC	18.13	52	3.77	.19	NS
PSC Subordinate	17.97	64	4.45		
D. Female (Black and White)					
Average Non-PSC	18.55	52	4.86	.89	NS
PSC Subordinate	17.76	60	4.452		
E. Combined					
Average Non-PSC	18.35	117	4.44	.84	NS
PSC Subordinate	17.87	124	4.45		

Appendix R

RATING OF SUBORDINATES BY SUPERVISORS AS A FUNCTION OF SUPERVISORS' LPC SCORE

(Ratings based on an average rating of subordinates in cases where a supervisor reported multiple subordinates)

Subordinate Rating Scale	Mean	N	Standard Deviation	t	p
1. Performance of the Worker					
Low LPC Supervisors	18.58	66	4.57	.67	NS
High LPC Supervisors	19.07	67	3.73		
2. Adjustment of the Worker					
Low LPC Supervisors	20.99	66	3.29	1.16	NS
High LPC Supervisors	21.69	67	3.60		
3. Motivation of the Worker					
Low LPC Supervisors	20.20	66	4.95	1.86	NS
High LPC Supervisors	21.75	67	4.58		
4. Stability of the Worker					
Low LPC Supervisors	15.81	66	3.79	1.91	NS
High LPC Supervisors	17.11	67	4.00		
5. Potential of the Worker					
Low LPC Supervisors	17.13	66	4.50	1.77	NS
High LPC Supervisors	18.47	67	4.20		

Appendix S

BREAK-OUT OF QUESTIONNAIRE ITEMS, BY PSYCHOLOGICAL TEST

A. Forced-Choice Response Condition

Test	Order of Items in Questionnaire	Test Item Number[a]	Alternative Scored[b]
1. Cynical Distrust of People	5	1	a
	14	2	a
	51	3	b
	32	4	b
2. Cynical Distrust of Organizations	4	1	a
	13	2	b
	48	3	b
	31	4	a
3. Weak Self-Regard	7	1	a
	16	2	b
	25	3	a
	34	4	b
	41	5	a
4. Achievement Motivation	6	1	b
	15	2	a
	24	3	b
	33	4	a
	40	5	b
	44	6	a
5. Time Sense	3	1	a
	47	2	b
	21	3	a
	55	4	b
	39	5	b
6. Protestant Ethic	9	1	b
	18	2	a
	27	3	b
	36	4	a
	42	5	a
	52	6	a
7. Expectation of Success	8	1	b
	17	2	a
	26	3	b
	35	4	a
8. Powerlessness	1	1	b
	43	2	a
9. Meaninglessness	50	1	b
	28	2	a
10. Normlessness	37	1	a
	56	2	b
11. Value Isolation	54	1	b
	11	2	b
12. Self-Estrangement	20	1	a
	45	2	b
	23	3	a
13. Work Demands	12	1	b
	53	2	a
	29	3	a
	38	4	a
	10	5	b

Test	Order of Items in Questionnaire	Test Item Number	Alternative Scored
14. Orientation Toward Work	46	1	a
	22	2	a
	2	3	a
	49	4	a
	19	5	a
	30	6	a

B. Likert-Type Response Condition

Test			Direction of Scoring Response[c]
1. Cynical Distrust of People	1	1	P
	12	2	P
	42	3	P
	18	4	R
	30	5	R
	52	6	R
2. Cynical Distrust of Organizations	19	1	P
	31	2	P
	3	3	R
	53	4	P
	43	5	P
3. Weak Self-Regard	4	1	P
	32	2	P
	20	3	P
	5	4	P
	44	5	P
4. Achievement Motivation	6	1	P
	21	2	P
	33	3	P
	7	4	P
	45	5	P
	67	6	P
	68	7	P
5. Time Sense	8	1	R
	22	2	R
	34	3	R
	9	4	R
	40	5	R
	63	6	R
	54	7	R
	47	8	R
6. Protestant Ethic	48	1	R
	45	2	P
	23	3	R
	10	4	P
	55	5	P
	49	6	R
7. Expectation of Success	41	1	P
	51	2	P
	17	3	R
	29	4	R
	60	5	R
	69	6	P

Test	Order of Items in Questionnaire	Test Item Number	Direction of Scoring Response
8. Powerlessness	24	1	R
	11	2	P
	36	3	P
	56	4	R
9. Meaninglessness	37	1	R
	12	2	P
	57	3	R
	24	4	P
10. Normlessness	38	1	P
	58	2	R
	13	3	P
	26	4	P
	70	5	R
11. Value Isolation	14	1	P
	27	2	R
	39	3	P
12. Self-Estrangement	28	1	P
	65	2	R
	64	3	P
	16	4	R
	59	5	P
13. Work Demands	61	1	P
	2	2	R
	46	3	P
	50	4	P
	15	5	P
	66	6	P

Test	Order of Items in Questionnaire	Test Item Number	Alternative Scored
14. Orientation Toward Work		1	a
		2	a
		3	a
		4	a
		5	a
		6	a

Items referred to in Test Item Number column are shown in Appendix C.

[b] One point assigned if the indicated alternative is chosen.

[c] A "P" indicates that the value of the alternative chosen by respondent is scored as is (e.g., 2 = 2), whereas an "R" indicates that the scale is reversed (e.g., 6 = 1, 5 = 2) and the resulting score assigned the item.